

PREFACE

This List of Materials (Telecommunications) supersedes all preceding issues including supplements of RUS Informational Publication 344-2. It reflects all actions of the Technical Standards Committees "A" and "B" (Telecommunications) through January 31, 1999, and includes changes in listings due to additions, deletions, and corrections made through Meeting No. 715 of Technical Standards Committee "A" (Telecommunications). Supplements reflecting changes in the List of Materials (Telecommunications) will be issued periodically and should be inserted to keep your copy up-to-date.

The small letters used to designate many construction items listed herein correspond to the letters used on construction drawings to indicate individual items of material; however, many equipment items have been assigned letter combinations only as a means of identification within the List of Materials (Telecommunications).

The acceptance of an additional item or the deletion of an existing item is a function of the RUS Administrator and Technical Standards Committees "A" and "B" (Telecommunications). Anyone desiring to have a new item placed on the List of Materials (Telecommunications), or believing an existing item should be removed from the List of Materials (Telecommunications), is invited to submit the matter to Technical Standards Committee "A" (Telecommunications). Any communication calling attention to an error, an obsolete item, etc., will also be appreciated. All communications should be addressed to the Chairman, Technical Standards Committee "A" (Telecommunications), Stop 1598, U.S. Department of Agriculture, Rural Utilities Service, 1400 Independence Avenue, SW., Washington, D.C. 20250-1598.

The inclusion of an item in the List of Materials (Telecommunications) does not indicate that that item's manufacturer or its principals have not been debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded pursuant to Executive Order 12549, Debarment or Suspension, or any rules or regulations issued thereunder, including 7 CFR Part 3017 ("Debarment Regulations"). Therefore, borrowers must comply with the requirements imposed by the Debarment Regulations before entering into any "covered transaction," as defined by 7 CFR Part 3017, involving any item on this List of Materials (Telecommunications).

JANUARY 1999

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rm.....	Radiotelephone equipment, mobile and fixed	*
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*Item no longer listed.

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zz.....	Poles, thermal treatment	*

*Item no longer listed.

	<u>Item</u>		<u>Page</u>
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" " (Filled)	sc		1.1
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" terminating (TIP)	ct		1.2
Wires, aerial service	nt		1.4
" buried, filled	sa		1.3

ORDERING INFORMATION

When ordering wire and cable having a standard RUS Unit Designation, this designation must be specified with the appropriate suffix or combinations of suffixes to indicate the type to be supplied. For example, filled cable with gopher-resistant shield containing copper and having compartmental cores (Screened) would be designated "BFCYH."

sc - Buried Cable

RUS Standard Designations "BFC", "CW", and "UF" (Filled) 7 CFR 1755.390
 These manufacturers' cables shown by catalog designations comply with 7 CFR 1755.390

RUS Standard Suffixes

<u>Manufacturer</u>	<u>A(1)</u>	<u>C(1)</u>	<u>Y(1)</u>	<u>X(1)</u>	<u>H(1)</u>	<u>H1C(2)</u>	<u>P(1)</u>
Belden Wire & Cable	WG__ (10)AR	WG__ (10)CR	WG__ (10)JR	WG__ (10)WR	-	-	-
BICCGeneral	PE-39-AL	PE-39-CU5	PE-39-CBS	PE-39-CAC	__ (7)T1	__ (7)T1C	-
NORCOM/CDT	AJ__ (14)K__ (18)	AJ__ (14)X	AJ__ (14)X__ (20)	AJ__ (14)K__ (19)	-	-	-
Superior/Essex	SEALPIC ^R -F	CUPIC ^R -F	__ (11)PIC ^R -F	CASPIC ^R -F	__ (7)T1	__ (7)T1C	__ (8)P
	-	-	CUVIC ^R -F10	-	__ (7)T1	__ (7)T1C	__ (8)P
Telmag, S.A.	SCREBH	SCREBCUH	SCREBCAH	SCREBhf	-	-	-

See page 1.1.2 for suffixes and notes.

1.1.1
5-00
sc

sc - Buried Cable

RUS Standard Designations "BFC", "CW", and "UF" (Expanded Insulation - Filled) 7 CFR 1755.890
These manufacturers' cables shown by catalog designations comply with 7 CFR 1755.890

RUS Standard Suffixes

<u>Manufacturer</u>	<u>A(1)</u>	<u>C(1)</u>	<u>Y(1)</u>	<u>X(1)</u>	<u>H(1)</u>	<u>H1C(2)</u>	<u>P(1)</u>
Belden Wire & Cable(5)	WA__ (10)AR	-	-	WA__ (10)WR	KA__ (10) __ (16)	-	-
BICCGeneral(5)	PE-89-AL	PE-89-CU5	PE-89-CBS	PE-89-CAC	__ (7)T1	__ (7)T1C	-
NORCOM/CDT(5)	BJ__ (14)K__ (18)	BJ__ (14)X	BJ__ (14)X__ (20)	BJ__ (14)K__ (19)	-	-	-
Superior/Essex(6)	SEALPIC ^R -F__ (17)	CU ^R PIC ^R -F__ (17)	__ (11)PIC ^R -F__ (17)	CASPIC ^R -F__ (17)	__ (7)T1	__ (7)T1C	__ (8)P
	-	-	CU ^R PIC ^R -F__ (17)10	-	__ (7)T1	__ (7)T1C	__ (8)P
Telmag, S.A.(4)(5)	SCEeEBH	-	-	SCEeEBHf	-	-	-

See page 1.1.2 for suffixes and notes.

Suffixes

Coated Aluminum Shield-----A
5 Mil Copper Shield-----C
Gopher-Resistant Shield Containing Copper-----Y
Gopher-Resistant Shield/Armor Design-----X
Screened Cable for T1 Carrier-----H
Screened Cable for T1C Carrier-----H1C
Preconnectorizd Cable 100 pairs and greater-----P

Notes:

- (1) Available in 19 through 26 AWG conductor sizes.
- (2) Available in 19 through 24 AWG conductor sizes.
- (4) Not accepted for 19 AWG conductor sizes.
- (5) Accepted for only foam/skin.
- (6) Accepted for foam and foam/skin.
- (7) Replace blank with manufacturer's catalog designation shown in the listing for suffixes A through X.
- (8) Replace blank with manufacturer's catalog designation shown in the listing for suffixes A through H1C.
- (10) Replace blank with either the number 9, 2, 4, or 6 to specify conductor AWG size.
- (11) Replace blank with either the letters B1 or GO to specify shield type.
- (14) Replace blank with either the letter B, A, M, or T to specify conductor AWG size.
- (16) Replace the blank with either the letters AR or WR to specify shield type.
- (17) Replace blank with either the letter F or the letters SF to specify conductor insulation type.
- (18) Leave space blank or replace blank with the letter F to indicate either a bonded or flooded coated aluminum sheath design.
- (19) Replace blank with either the letter S or the letters FS to indicate either a bonded or flooded coated aluminum/coated steel sheath design.
- (20) Replace blank with either the letter G or S to specify shield type.

1.2
9-99
ct

Manufacturer

ct - Terminating Cable⁽¹⁾

These manufacturers' cables shown by X's comply with 7 CFR 1755.870.

RUS Standard Designation Suffixes

	<u>A</u>	<u>P</u>
BICCGeneral	X	-

Suffixes:

Coated Aluminum ----- A
Preconnectorized Cable 100 pairs and greater ----- P

Notes: (1) To be supplied in only 22 and 24 AWG sizes.

Manufacturer

Catalog Designation

sa - Filled Buried Wires

These manufacturers' filled buried wires shown by catalog designations comply with 7 CFR 1755.860.

RUS Standard Designations:	<u>BFW (distribution)</u> (1)		<u>SEB (service)</u> (2)	
	<u>N</u>	<u>Y</u>	<u>N</u>	<u>Y</u>
Belden Wire & Cable	BFWN	BFWY	BFWN	BFWY
BICCGeneral	BFWN(3)	BFWY(3)	BFWN	BFWY
Superior/Essex	BDW-B	BDW-G-CSC	BDW-B	BDW-G-CSC

Suffixes:

Copper Alloy 220 (Bronze) Shield-----N

Gopher-Resistant Shield-----Y

Notes:

- (1) Available in 22 and 24 AWG conductor sizes.
- (2) Available only in 22 AWG conductor size.
- (3) Can only be supplied in 22 AWG conductor size.

1.4
3-00
nt

Manufacturer

Catalog Designations

nt - Aerial Service Wires

RUS Standard Designations "SEA" and "SEK"

These manufacturers' wires shown by catalog designations comply with 7 CFR 1755.700 through 7 CFR 1755.704

nt-a Copper Covered Steel Reinforced (CCSR) Aerial Service Wires

	<u>Standard</u>		<u>Reduced</u>		<u>Super-Reduced</u>	
	<u>oval</u>	<u>dumbbell</u>	<u>oval</u>	<u>dumbbell</u>	<u>oval</u>	<u>dumbbell</u>
Belden W8re & Cable	-	ASW-1/18-1/2-F	-	-	-	-
BICCGeneral	-	ADR-182-PVC	-	-	-	-
Superior/Essex	ADP	ADP-D	-	-	ADP/SR	ADP/SR-D

nt-b Nonmetallic Reinforced (NMR) Aerial Service Wires

	<u>2-Pair</u>	<u>3-Pair</u>	<u>5-Pair</u>	<u>6-Pair</u>
Belden Wire & Cable	2X22 __ ⁽¹⁾	3X22__ ⁽¹⁾	5X22__ ⁽¹⁾	6X22__ ⁽¹⁾
BICCGeneral	2 TPR 22 AWG GSDW	-	-	6 TPR 22 AWG GSDW
Superior/Essex	2X22 ADP NMS	-	-	6X22 ADP NMS

⁽¹⁾Replace blank with either "FRASW" or "FRASW Universal."

oc-Fiber Optic Cable

RUS Standard Designations "BFO", "CO", and "UO" (Filled) 7 CFR 1755.900
 These manufacturers' cables shown by catalog designations comply with 7 CFR 1755.900

oc-a Unit Core or Central Core Tube Fiber Core Construction

RUS Standard Suffixes

Manufacturer

Cable Construction

	<u>A(1)</u>	<u>B(1)</u>	<u>C</u>	<u>D</u>	<u>P(2)</u>	<u>Mode</u>	
						<u>s</u>	<u>m</u>
Alcatel(5)	-	UND	__ (8)RD	-	-	X	-
Lucent Technologies/Fitel Lucent Technologies(6)	-	__ (27)DNX	__ (27)D__ (9)X	-	-	X	-
Pirelli(5)	-	-	-	Dri-Flex TM Armored CLT TM (4)(19)	-	X	-
Siecor(7)	-	EST-__ (10)(4)	SST-Ribbon	EST-__ (10)(4)	(X)P-RUS	X	X
	-	SST-Ribbon	-	OPTISPAN ^R (4)	(X)P-RUS	X	X
Sumitomo Electric(7)	-	SE-__ (26)LD	SE-__ (26)LB	-	-	X	X
	-	SE-__ (26)RD	SE-__ (26)RB	-	-	X	X
Superior Essex(5)	-	SLT(4)	-	SLT(4)	-	X	-

See page 1.5.4 for suffixes and notes.

oc-Fiber Optic Cable

RUS Standard Designations "BFO", "CO", and "UO" (Filled) 7 CFR 1755.900
These manufacturers' cables shown by catalog designations comply with 7 CFR 1755.900

oc-b Gel Filled Multiple Loose Tube Core Construction⁽³⁾

RUS Standard Suffixes

Manufacturer

Cable Construction

Mode

	<u>E(1)</u>	<u>F(1)</u>	<u>G</u>	<u>H</u>	<u>P(2)</u>	<u>s</u>	<u>m</u>
Alcatel ⁽⁵⁾	__(11)SD	__(11)ND	__(11)__(12) _D	__(11)__(13) _D	-	X	-
Belden Wire & Cable ⁽⁶⁾	-	-	-	L__(29)-P	-	X	-
Chromatic Technologies ⁽⁵⁾	-	R740L Series	-	R700L Series	-	X	-
Lucent Technologies/Fitel Lucent Technologies ⁽⁷⁾	AT-D2	AT-12	AT-__(14) ₂	AT-__(15) ₂	(X)P-RUS	X	X
Pirelli ⁽⁵⁾	-	(19)CS1LALNSJA	-	(19)CS1LALNSAA	-	X	-
Remeo Products ⁽⁷⁾	-	22 Series	-	23 Series ⁽²⁰⁾ 28 Series ⁽²³⁾	-	X	X
	-	-	-		-	X	X
Siecor ⁽⁷⁾	TubeStar ^R Mini-Bundle ^R	TubeStar ^R Mini-Bundle ^R	TubeStar ^R Mini-__(16) _R	TubeStar ^R Mini-__(16) _R	(X)P-RUS (X)P-RUS	X X	X X
Sumitomo Electric ⁽⁷⁾	SE-__(26)HK	SE-__(26)GK	SE-__(26)H__(18)	SE-__(26)G__(18)	-	X	X
Superior Essex ⁽⁵⁾	MLT	MLT	MLT	MLT	-	X	-

See page 1.5.4 for suffixes and notes.

oc-Fiber Optic Cable

RUS Standard Designations "CFO" (Filled) 7 CFR 1755.900
These manufacturers' cables shown by catalog designations comply with 7 CFR 1755.900

oc-c Self-Supporting Filled Fiber Optic Cables

RUS Standard Suffixes

Cable Construction

Manufacturer

						<u>Mode</u>	
	<u>I</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>P(2)</u>	<u>s</u>	<u>m</u>
Alcatel	__ (17)FD(5)	EZ Span TM (6)	__ (17)BD(5)	-	-	X	-
	JFA(6)(22)	-	J__ (24)D(6)(22)	-	-	X	-
BICCGeneral(6)	4M1Y-DWB(22)	-	4H1N-DWB(22)	-	-	X	-
Lucent Technologies/Fitel Lucent Technologies(7)	AT-1M(7)	AT-27(7)	AT-NM(7)	-	(X)P-RUS	X	X
	-	AT-27D(22)(25)	-	-	(X)P-RUS	X	X
Remeo Products(7)	88 Series	88 Series	83 Series	83 Series	-	X	X
Siecor(7)	EST-_(10)	SOLO-ADSS	EST-_(10)	-	(X)P-RUS	X	X
	Mini-Bundle ^R	-	OPTISPAN ^R	-	(X)P-RUS	X	X
	SST-Ribbon	-	Mini-_(16)(R)	-	(X)P-RUS	X	X
	-	-	SST-Ribbon	-	(X)P-RUS	X	X
	ALTOS TM (22)	-	ALTOS TM __(21)(22)	-	(X)P-RUS	X	X
Superior Essex(5)	MLT-8	-	MLT-8	-	-	X	-

See page 1.5.4 for suffixes and notes.

1.5.3
6-00
OC

oc-Fiber Optic Cable

RUS Standard Designations "BFO", "CO", and "UO" (Filled) 7 CFR 1755.900
These manufacturers' cables shown by catalog designations comply with 7 CFR 1755.900

oc-d Dry Filled Multiple Loose Tube Fiber Core Construction⁽³⁾⁽²²⁾

RUS Standard Suffixes

Manufacturer

Cable Construction

Mode

	<u>E(1)</u>	<u>F(1)</u>	<u>G</u>	<u>H</u>	<u>P(2)</u>	<u>s</u>	<u>m</u>
	Alcatel ⁽⁶⁾	BSD	BND	BRD	B__ ⁽²⁴⁾ D	-	X
BICCGeneral ⁽⁶⁾	-	4__ ⁽³⁰⁾ 1A-DWB	-	4H1F-DWB	-	X	-
Chromatic Technologies ⁽²⁸⁾	-	DR740L Series	-	-	-	X	X
Lucent Technologies/Fitel Lucent Technologies ⁽²⁵⁾	AT-D2D	AT-12D	AT-__ ⁽¹⁴⁾ 2D	AT-__ ⁽¹⁵⁾ 2D	(X)P-RUS	X	X
Pirelli ⁽⁵⁾	-	Dri-Flex TM	-	Dri-Flex TM ⁽¹⁹⁾	-	X	-
Siecor ⁽⁷⁾	ALTOS TM	ALTOS TM	ALTOS TM __ ⁽²¹⁾	ALTOS TM __ ⁽²¹⁾	(X)P-RUS	X	X
Sumitomo Electric ⁽⁷⁾	-	DriCore [®]	-	DriCore [®] __ ⁽¹⁸⁾	-	X	X

See page 1.5.4 for suffixes and notes.

Suffixes:

A - Nonarmored with Metallic Strength Members Embedded in Jacket
B - Nonarmored with Dielectric Strength Members Embedded in Jacket
C - Armored with Metallic Strength Members Embedded in Jacket
D - Armored with Dielectric Strength Members Embedded in Jacket
E - Nonarmored with Metallic Central Strength Member
F - Nonarmored with Dielectric Central Strength Member
G - Armored with Metallic Central Strength Member
H - Armored with Dielectric Central Strength Member
I - Nonarmored with Metallic Support Messenger
J - Nonarmored with Dielectric Support Messenger
K - Armored with Metallic Support Messenger
L - Armored with Dielectric Support Messenger
P - Preconnectorized Cable
s - Single Mode
m - Multimode

Notes

- (1) Aerial and duct use only.
- (2) Replace (X) with manufacturer's catalog designation shown in the listing for Cable Construction Types A through L.
- (3) May contain multiple fibers per tube.
- (4) Not embedded in jacket; surrounds central core tube.
- (5) Accepted only for dispersion-unshifted and dispersion-shifted single mode optical fibers.
- (6) Accepted only for dispersion-unshifted single mode optical fibers.
- (7) Accepted for dispersion-unshifted and dispersion-shifted single mode optical fibers. Also accepted for 50/125 and 62.5/125 micrometer multimode optical fibers.
- (8) Replace blank with either the letter U or M.
- (9) Replace blank with either the letter H, M, R, or S.
- (10) Leave blank space either blank or replace blank space with the word "micro."
- (11) Replace blank with either the letter A or P.
- (12) Replace blank with either the letter R or the number 9.
- (13) Replace blank with either the letter A or the number 8.
- (14) Replace blank with either the letter B or K.
- (15) Replace blank with either the letter H or N.
- (16) Replace blank with either the word "bundle" or "bundle light."
- (17) Replace blank with either the letter D, F, or U.
- (18) Replace blank with either the letter A or E.
- (19) When ordering designate either single or double jacketed cable.
- (20) Double jacketed design.
- (21) Leave space blank or replace blank space with the word "Lite."
- (22) Cable uses a "Water Blocking Tape" in place of a "Gel Compound" as the filling compound surrounding the multiple loose tube buffers in the cable core.
- (23) Single jacketed design.
- (24) Replace blank with either the letter A or the number 8.
- (25) Accepted for dispersion-unshifted and dispersion-shifted single mode optical fibers. Also accepted for 62.5/125-micromode optical fibers.
- (26) Replace blank with either the number 1, 2, 3, or 4.
- (27) Replace blank with either the number 4 or 7.
- (28) Accepted only for dispersion-unshifted single-mode and 50/125 and 62.5/125 micrometer multimode optical fibers.
- (29) Replace blank with either the number 6 or 12 to indicate buffer tube size.
- (30) Replace blank with either the letter M or H.

	<u>Item</u> <u>Designation</u>	<u>Page</u>
Cases, splice	pl	2.1
Conduit, underground	hc	2.2
Enclosures, ready-access, cable	er	2.3
Handholes	hh	2.4
Housings, buried plant	se	2.5
" central office splice for copper cables	sj	2.5.3
" " " " " fiber optic cables	sj	2.5.4
Manholes, precast concrete	hm	2.7
Pedestal, inserts, restricted access	sk	2.5.5
Posts, mobile home	sd	2.8
Sealer, buried plant housing	ps	2.6
" duct	sp	2.6
Terminals, wire, pole-mounted	wt	2.9

pl - Splice Closure

<u>Manufacturer</u>	<u>Max. Cable Dia. (6)</u>	<u>Straight</u>	<u>Branch</u>	<u>Encapsulant (2)</u>
<u>a - Aerial Splice Closure for Copper Cables</u>				
<u>Free-Breathing</u>				
Communications Technology Corp.	1.00"	C-3500	C-3500	--
	1.50"	C-3501	C-3501	--
	1.75"	C-3502	C-3502	--
	2.125"	C-3503	C-3503	--
	2.75"	C-3504	C-3504	--
	3.125"	C-3505	C-3505	--
	4.50"	C-3506	C-3506	--
	6.00"	C-3507	C-3507	--
	7.50"	C-3509	C-3509	--
	9.00"	C-3508	C-3508	--
	1.0"	Wingspan,C-2375-AAA	Wingspan,C-2375-AAA	--
	1.6"	Wingspan,C-2376-AA	Wingspan,C-2376-AA	--
	1.6"	Wingspan,C-2377-A	Wingspan,C-2377-A	--
	2.2"	Wingspan,C-2378-B	Wingspan,C-2378-B	--
	3.0"	Wingspan,C-2379-C	Wingspan,C-2379-C	--
3M Company	1.60"	SLiC 2X19 FB	SLiC 2X19 FB	--
	1.60"	SLiC 2X29 FB	SLiC 2X29 FB	--
	2.60"	SLiC 3X33 FB	SLiC 3X33 FB	--
	3.00"	SLiC 5X33 FB	SLiC 5X33 FB	--
	3.80"	SLiC 7X33 FB	SLiC 7X33 FB	--
	3.80"	SLiC 9X36 FB	SLiC 9X36 FB	--
PSI Telecom (GATM)	1.50"	GATM92000	GATM92000	--
	2.50"	GATM95000	GATM95000	--
	4.00"	GATM97000	GATM97000	--
Raychem	0.90"	TRAC - AA	TRAC - AA	--
	1.50"	TRAC - A	TRAC - A	--
	1.90"	TRAC - B	TRAC - B	--
	2.60"	TRAC - B+	TRAC - B+	--
	3.30"	TRAC - C	TRAC - C	--
URASEAL	1.2"	CA1900WE-A1S	CA1900WE-A1S	--
	1.8" *	CA1900WE-B1S	CA1900WE-B1S	--
	2.5" *	CA1900WE-C1S	CA1900WE-C1S	--

*The branch type will accommodate maximum cable dia. of 2.2" and 3.0", respectively.

See page 2.1.5 for notes.

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pl

pl - Splice Closure

<u>Manufacturer</u>	<u>Max. Cable Dia.</u> (6)		<u>Straight</u>	<u>Branch</u> (4)	<u>Encapsulant</u> (2)
<u>a - Aerial Splice Closure for Copper Cables</u>					
<u>Pressurized</u>					
Preformed Line	2.2"	8006021	8006021	--	
Products	4.1"	8006022	8006022	--	
	6.85"	8006023	8006023	--	
	4.1"	8006024	8006024	--	
	6.85"	8006025	8006025	--	
	10.1"	8006177	8006177	--	
	10.1"	8006219	8006219	--	
	10.1"	8006220	8006220	--	
	10.1"	8006221	8006221	--	
PSI Telecomm. (510 Version)	1.0"	2X2AA	2X2AA	--	
	1.0"	2Y2AA	2Y2AA	--	
	1.6"	2A2	2A2	--	
	2.9"	2B2	2B2	--	
	3.5"	2C2	2C2	--	
	3.5"	2D2	2D2	--	
	4.5"	2E2	2E2	--	

b - Buried Splice Closure for Copper Cables

<u>Filled</u>					
Brand-Rex	1.42"	SG 95-2		--	Splicegard
	1.42"	SG 155-4	SG 155-4		Liquid
3M	0.58"	8981-4462/GEL		--	4442GEL
	1.0"	8982-4462/GEL		--	4442GEL
	1.2"	--	BB2 x 24 4462/GELLA SC, DC-LHS		
	1.5"	8983-4462/GEL		--	
	1.7"	--	BB3 x 24 4462/GELLA SC, DC-LHS		
	2.0"	8984-4462/GEL	BB4 x 24 4462/GELLA SC, DC-LHS		
	2.4"	8985-4462/GEL	BB5 x 26 4462/GELLA SC, DC-LHS		
	3.33"	8986-4462/GEL		--	
	3.3"	--	BB6 x 26 4462/GELLA 2DC-LHS		
	3.6"	--	BB7 x 26 4462/GELLA 2DC-LHS		
	3.8"	--	BB9 x 26 4462/GELLA 2DC-LHS		

See page 2.1.5 for notes.

<u>Manufacturer</u>	<u>Max. Cable Dia.</u> (6)	<u>Straight</u>	<u>Branch</u>	<u>Encapsulant</u> (2)
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b - Buried Splice Closure for Copper Cables

Filled (Cont'd)

Preformed Line	2.2"	8006287	8006287	RD
Products	4.1"	8006288	8006288	RD
	4.1"	8006289	8006289	RD
	7.1"	8006290	8006290	RD
	7.1"	9006291	8006291	RD
	7.1"	8006292	8006292	RD
	10.1"	8006293	8006293	RD
	10.1"	8006294	8006294	RD
	10.1"	8006295	8006295	RD
PSI Telecomm.	1.0"	9P212(*)-515	9P212(*)-515	D-Plus
	1.0"	9P224(*)-515	9P224(*)-515	
	2.0"	9P324(*)-515	9P324(*)-515	
	2.0"	9P424(*)-515	9P424(*)-515	
	2.5"	9P526(*)-515	9P526(*)-515	
	3.7"	9P726(*)-515	9P726(*)-515	
	4.0"	9P926(*)-515	9P926(*)-515	

*Insert end cap configuration per manufacturer.

Raychem	0.6" (2-6 Pair)	XAGA MCS-A	XAGA MCS-A	Caschem 126
	0.9" (6-12 Pair)	XAGA MCS-B	XAGA MCS-B	
	1.2"	XAGA-1650-REA/E-S	XAGA-1650-REA/E-S	
	1.8"	XAGA-1650-REA/E-A	XAGA-1650-REA/E-A	
	2.5"	XAGA-1650-REA/E-B2	XAGA-1650-REA/E-B2	
	3.0"	XAGA-1650-REA/E-C2	XAGA-1650-REA/E-C2	
	3.9"	XAGA-1650-REA/E-D2	XAGA-1650-REA/E-D2	
	3.9"	XAGA-1650-REA/E-D4	XAGA-1650-REA/E-D4	

c - Underground Splice Closure (Manhole) for Copper Cables

Filled

Brand-Rex	1.42"	SG 95-2	--	Splicegard
	1.42"	SG 155-4	SG 155-4	Liquid

See page 2.1.5 for notes.

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pl

pl - Splice Closure

<u>Manufacturer</u>	<u>Max. Cable Dia.</u> ⁽⁶⁾	<u>Straight</u>	<u>Branch</u>	<u>Encapsulant</u> ⁽²⁾
<u>c - Underground Splice Closure (Manhole) for Copper Cables</u>				
<u>Pressurized</u>				
Communications Technology	1.0"	C-5100	C-5105	--
	1.6"	C-5101	C-5106	--
	2.2"	C-5102	C-5107	--
	3.0"	C-5103	C-5108	--
	3.0"	C-5104	C-5109	--
Preformed Line Products	2.2"	8006021	8006021	--
	4.1"	8006022	8006022	--
	6.85"	8006023	8006023	--
	4.1"	8006024	8006024	--
	6.85"	8006025	8006025	--
	10.1"	8006219	8006219	--
	10.1"	8006220	8006220	--
	10.1"	8006221	8006221	--
PSI Telecomm. (510 Version)	2.9"	2B2	2B2	--
	3.5"	2C2	2C2	--
	3.5"	2D2	2D2	--
	1.0"	2X2AA	2X2AA	--
	1.0"	2Y2AA	2Y2AA	--
	1.6"	2A2	2A2	--
	4.5"	2E2	2E2	--

d - Buildings and Central Office Vault Splice Closure for Copper Cables⁽³⁾

Non-Filled

	<u>Non-Flame Retardant</u> ⁽⁹⁾	<u>Flame Retardant</u>
3M Company (Kohler & Besser)	K & B Series	K&B Series ⁽⁵⁾
PSI Telecommunications	2 * 2 (*)	2 * 4 (*)
Preformed Line Products	8006 Series	8006 FR Series
URASEAL	-	CA2000 FR Series

*Insert inner diameter and cover length identifying data according to manufacturer's instructions.

See page 2.1.5 for notes.

pl - Splice Closure

<u>Manufacturer</u>	<u>In-Line</u>	<u>Butt</u>	<u>Branch</u>	<u>Encapsulant</u> ⁽²⁾	<u>Maximum Splice Capacity</u> ⁽⁸⁾
<u>e - Aerial Splice Closure for Fiber Optic Cables</u> ⁽¹⁾					
<u>Filled</u>					
Preformed Line Products	8001006	8001005	8001006	RD	72
<u>Non-Filled</u> ⁽⁷⁾					
3M	2178S	2178S	2178S	--	96
	2178LS	2178LS	2178LS	--	480
Preformed Line Products	8006661	8006661	8006661	--	48
	8006659	8006659	8006659	--	144
	8006660	8006660	8006660	--	288
Raychem	--	FOSC400 A4-RUS	FOSC400 A4-RUS	--	32
	--	FOSC400 B2-RUS	FOSC400 B2-RUS	--	96
	--	FOSC400 B4-RUS	FOSC400 B4-RUS	--	96
	--	FOSC400 D5-RUS	FOSC400 D5-RUS	--	576

f - Buried Splice Closure for Fiber Optic Cables⁽¹⁾

<u>Filled</u>					
3M	2177-R	2177-R	2177-R	4442	64
Preformed Line Products	8001006	8001005	8001006	RD	72

See page 2.1.5 for notes

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Manufacturer

pl - Splice Closure

g - Buildings and Central Office
Vault Splice Closure for Fiber Optic Cables

Non-Filled

	<u>Non-Flame Retardant</u> ⁽⁹⁾	<u>Flame Retardant</u>
Lucent Technologies	--	UCB1
3M	2178S	2178 FOSC
Preformed Line	8006659	8001010
Products	8006660	8001011
	8006661	

- Notes:**
- (1) Fiber organizer trays shall be ordered in accordance with manufacturer's instructions.
 - (2) The encapsulant is a component part of the splice closure system and shall be provided by the closure manufacturer. The encapsulant is not accepted on an individual basis.
 - (3) The main cable diameter, cable configuration (number of cables, pair count and gauge), and splice bundle diameter should be specified by the engineer.
 - (4) 3M Better Buried closures are accepted for Branch splicing only.
 - (5) For vertical installations order standard closure with "5925 FireBarrier Shield."
 - (6) Metric sizes available for the following manufacturers: 3M.
 - (7) These closures may also be installed in pedestals.
 - (8) Maximum capacity for fusion splices.
 - (9) Non-flame retardant cases shall not be placed in a building or central office, they may be placed in a cable vault.

<u>Manufacturer</u>	<u>Type Conduit</u>	<u>Catalog Number</u>
	<u>hc - Underground Conduit</u>	
Allwire, Inc.	Flexible plastic	ALLDUCT
American Pipe & Plastics	Plastic Plastic Plastic	Type B, C, and D Type EB and DB PVC Multi-Duct (2,3,4 and 6-way)
Americon International	Flexible plastic Plastic	HDPE Duct PVC Type C
Apache Plastics, Inc.	Plastic	Type EB and Type DB
ARMCO	Plastic	Smooth-Cor Type B and Type C
Arnco	Flexible plastic	HDPE Conduit
Bay Plastics, Inc.	Plastic	Type B and Type C
Bristolpipe	Plastic Plastic	Type B, C, and D Type EB and Type DB
Can-Tex	Plastic Plastic	Type EB and Type DB Type B, C, and D
Carlton	Plastic Plastic Plastic	Type EB and Type DB Type B, C, and D Multi-Gard
Certain-Teed Products Corp.	Plastic	Type EB and Type DB
CIBA-GEIGY(1)	Fiberglass	T & D Conduit
Condux International, Inc.	Concrete Plastic	Condux Type EB and Type DB
CSR Polypipe	Flexible plastic	HDPE Duct
Dura-line	Flexible plastic	HDPE Duct
Eagle Pacific Industries, Inc.	Plastic Flexible plastic	Type EB and Type DB HDPE Coiled Duct
Endot Industries	Flexible plastic	HDPE Duct
Freedom Plastics, Inc.	Plastic	Type C
Hercules, Inc.	Flexible plastic	Corflo plastic conduit
Hurlbut Plastic Pipe	Plastic	Type C
Ingomar Plastic Pipe	Plastic	Type B and Type C
J-M Manufacturing Company	Plastic	Types C, EB, and DB
Kyova	Plastic	Type EB and Type DB

See page 2.2.1 for notes.

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<u>Manufacturer</u>	<u>Type Conduit</u>	<u>Catalog Number</u>
	<u>hc - Underground Conduit</u>	
LCP National Plastics, Inc.	Plastic Plastic	Type EB and Type DB Type B and Type C
Northern Pipe Products	Plastic	Type B, C, and D
OMNI	Flexible plastic	HDPE Duct
Petroflex	Flexible plastic Flexible plastic	HDPE Duct Corrugated HDPE Duct
Phillips Products Co., Inc.	Flexible plastic	Driskon 3200
Phone Ducs	Plastic	Multiple plastic conduit (4, 6, & 9 Way)
PLEXCO	Flexible plastic	PLEXCO Duct
PWPipe	Plastic	Type EB and Type DB
Pyramid Industries, Inc.	Plastic Flexible plastic	Type EB and Type DM HDPE Conduit
Quail Plastics	Plastic	Type EB and Type DB
Queen City Plastics	Plastic	Type EB and Type DB
River City Plastics	Plastic	Type EB and Type DB
Sedco	Plastic	Type EB and Type DB
Southern Pipe, Inc.	Plastic	PVC Types EB, DB, and Sch. 40
Tamaqua Cable Products	Flexible plastic	HDPE Duct
Tridyn Industries	Plastic	Type EB and Type DB
Vassallo Industries	Plastic	Type B and Type C
Wesflex	Flexible plastic	Flex-Con

Note: For fiber and plastic conduit, Type I, Type B or Type EB is for concrete encasement and Type II, Type C or Type DB may be directly buried. Schedule 40 is a high strength conduit that may be used for concrete encasement or direct burial. Type D is for exposed installation, as on bridges.

(1) Filament wound fiberglass/epoxy conduit.

er - Cable Enclosures

Ready Access Enclosures

Lashed Cables

<u>Manufacturer</u>	<u>Main Cable Dia. Range</u>	<u>Straight</u>	<u>Branch</u>
Communications Technology Corp.	0.50-2.20"	Termax C-2280	-
RELTEC Corp. (Reliable Electric)	0.4-1.2" 1.2-2.0" 2.0-3.0"	100 MB-P10318 200MB-P10709 430	100 MBY-P10318 200MBY-P10709 430Y

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er

Manufacturer

er - Cable Enclosures

Ready-Access Enclosures

Strand-mounted, with two branch entrances (for lashed cables)

	<u>Type E</u>		<u>Type F</u>	
	<u>Galvanized Steel</u>	<u>Alum.-Clad Steel</u>	<u>Galvanized Steel</u>	<u>Alum.-Clad Steel</u>
Diameter of main:	1.2" Maximum		2.2" Maximum	
Diameter of branch:	0.75" Maximum		1.6" Maximum	
Type of strand:	200MBY	200MBY	200MBY	200MBY
RELTEC Corp. (Reliable Electric)				

e/w IDC Terminal Blocks

Strand-mounted, with two branch entrances (for lashed cables)

	<u>Main Cable Dia. Range</u>	<u>Branch Cable Dia. Range</u>	<u>Filled Unprotected</u>							
			<u>5-Pair</u>	<u>6-Pair</u>	<u>10-Pair</u>	<u>12-Pair</u>	<u>15-Pair</u>	<u>20-Pair</u>	<u>25-Pair</u>	
Communications Technology Corp.	0.50-2.20	-	Termax	Termax C-2498	Termax C-2499	Termax C-2500	Termax C-2501	Termax C-2502	Termax C-2503	C-2504
3M(3)	0.40-2.67"	-	SLIC ⁽³⁾ 328MT-SES-5	-	SLIC ⁽³⁾	-	SLIC ⁽³⁾	-	SLIC ⁽³⁾ 328MT-SES-25	
	0.40-4.00"	-	SLIC ⁽³⁾ 530MT-SES-5		SLIC ⁽³⁾	530MT-SES-10	SLIC ⁽³⁾	530MT-SES-15	530MT-SES-25	
	0.40-2.67"	-	-		-	SLIC ⁽³⁾ 328MTA-SES-12			SLIC ⁽³⁾ 328MTA-SES-25	
	0.40-4.00"	-				SLIC ⁽³⁾ 530MTA-SES-12			SLIC ⁽³⁾ 530MTA-SES-25	
PSI Telecom (GATM)(1)	0.30-1.50"	0.30-1.50"	-	-	GATM92H10	-	GATM92H15	GATM92H20	GATM92H25	
	0.40-2.50"	0.40-2.50"			GATM95H10		GATM95H15	GATM95H20	GATM95H25	
	0.50-4.00"	0.50-4.00"			GATM97H10		GATM97H15	GATM97H20	GATM97H25	
Raychem(1)(2)	0.55-1.90"	0.00-1.50"	-	-	-	DTerminator 2 ICT - 12 REA	-	-	DTerminator 2 ICT - 25 REA	

See page 2.3.2 for notes.

Manufacturer

er - Cable Enclosures

Ready-Access Enclosures

e/w Binding Post Terminal Blocks

Strand-mounted, with two branch entrances (for lashed cables)

Filled Unprotected

	<u>Main Cable Dia. Range</u>	<u>Branch Cable Dia. Range</u>	<u>Variable</u>
RELTEC	0.40-1.20"	0.40-0.80"	100MBY ⁽⁴⁾
	1.20-2.20"	0.40-1.60"	200MBY ⁽⁴⁾
	2.00-3.00"	1.10-2.20"	430MBY ⁽⁴⁾

Filled Protected

	<u>Main Cable Dia. Range</u>	<u>Branch Cable Dia. Range</u>	<u>Variable</u>
RELTEC	0.40-1.20"	0.40-0.80"	100MBY ⁽⁵⁾
	1.20-2.20"	0.40-1.60"	200MBY ⁽⁵⁾
	2.00-3.00"	1.10-2.20"	430MBY ⁽⁵⁾

Notes:

- ⁽¹⁾The numbers shown only include the unprotected versions of the RGTA-type terminal blocks.
- ⁽²⁾Sheath opening is limited to 22" with a Splice Bundle size of 4".
- ⁽³⁾Specify AMP or Raychem terminal blocks when ordering.
- ⁽⁴⁾May be ordered with up to 24 pairs using the 145BG RELTEC terminal block only.
- ⁽⁵⁾May be ordered with up to 12 pairs using the 281G, 283G, 381G, and 383G RELTEC terminal blocks only.

Manufacturer

Catalog Number

hh - Handholes(1)(2)

Handholes for Copper Systems

Armorcast	6001946 (13x24) 6001640 (17x30) 6001974 (24x36) 6001436 (36x60)
Associated Plastics	1324-1 1730-1 PW2436/18 PW3048/18 PW3048/36 PH3660/36-1 PH3660/18-1
Brooks Products	1324 1730
Carson Industries	1730-13B
CDR Systems (Homac)	TA-1324 TA-1730 TA-3660 TA-2436 TA-3048W TA-3048 TA-3060
Coil Sales (Charles Industries)	FMH 361 FMH 362 FMH 363
Pen-Cell Plastics	PE-10 PE-20 (Restricted to cable sizes up to 100 pairs) PE-36 PE-6HD PE-9HD PE-14HD PE-30HD PE-20HD PE-20U PE-20F PE-30U PE-30F PEM Series
Quazite	PC1324 PC1730 PX1324 PX1730

See page 2.4.2 for notes.

<u>Manufacturer</u>	<u>Catalog Number</u>
<u>hh - Handholes(1)(2)</u>	
<u>Handholes for Fiber Optic Systems</u>	
Armorcast	6001974 (24x36) 6001430 (30x48) 6001742 (30x60) 6001436 (36x60) 6001691 (39x30DI)
Associated Plastics	PH1324/18 PH1730/18 PH2436/18 PH3048/18 PH3048/36 5430-1 5440-1 PH3660/18-1 PH3660/36-1
CDR Systems (Homac)	TA-1730F TA-2436F TA-3048WF TA-3048F TA-3060F TA-3660F TA-4848F TA-4872F TA-4878F TA-4896F
Coastal Engineered Products	38-00520 38-00521 38-00522 38-00523
Coil Sales (Charles Industries)	FMH 361 FMH 362 FMH 363
Moore Diversified Products, Inc.	MOV-2S/D(3)
Pen-Cell Plastics	PE-14HD PE-20HD PE-20U PE-20F PE-30HD PE-30U PE-30F PE-36HD PE-36A PEM Series
Quazite	PG2436 PG3048 LG3060 LG3660 LR2732

See page 2.4.2 for notes.

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- Notes:**
- (1) Not for use in areas subject to vehicular traffic.
 - (2) Consult the manufacturer for ordering procedures for handhole depth and lid/cover locking devices and load bearing capacity.
 - (3) Rated for use in areas subject to vehicular traffic.

Manufacturer

se - Buried Plant Housings
(Complies with 7 CFR 1755.910)

Type BD Pedestals

Listed manufacturers are accepted to supply housing types as indicated by X's.

Type H Pedestals

	<u>Series</u>	<u>Notes</u>	<u>Pedestal Mounted</u>				<u>Pole Mounted</u>		
			<u>BD3</u>	<u>BD4</u>	<u>BD5</u>	<u>BD7</u>	<u>BD3A</u>	<u>BD4A</u>	<u>BD5A</u>
Champion Products Inc.	(BD)	(1)(2)(3)	X	X	X	X	X	X	X
Channell	CFP/EPT 600	(15)	X	-	-	-	-	-	-
	CFP/EPT 800	(15)	-	X	-	-	-	-	-
	CFP/EPT 1000	(15)	-	-	X	-	-	-	-
	MAH 1420	(15)	-	-	-	X	-	-	-
Coil Sales	(BD)	(2)(3)(15)	X	X	X	X	X	X	X
RELTEC	(UPC/BD)	(1)(2)(3)(7)(10)	X	X	X	X	X	X	X

See page 2.5.2 for notes.

2.5.1
7-00
se

Manufacturer

Designation

se - Buried Plant Housings

(Complies with 7 CFR 1755.910)

Type BD Pedestals

Listed manufacturers are accepted to supply housing types as indicated by X's.

Type M Pedestals

	<u>Series</u>	<u>Notes</u>	<u>Pedestal Mounted</u>			<u>Pole Mounted</u>			<u>Pole Mounted (Increased Hgt. Above Grd.)</u>		
			<u>BD14</u>	<u>BD15</u>	<u>BD16</u>	<u>BD14A</u>	<u>BD15A</u>	<u>BD16A</u>	<u>BD14AG</u>	<u>BD15AG</u>	<u>BD16AG</u>
Channell	CFP/EPT 600		X	-	-	-	-	-	-	-	-
	CFP/EPT 800		-	X	-	-	-	-	-	-	-
	CFP/EPT 1000		-	-	X	-	-	-	-	-	-
Coil Sales	(BD)	(2)(3)	X	X	X	X	X	X	X	X	X
Federal Telecom	(BD)	(2)(3)	X	X	X	X	X	X	X	X	X
RELTEC	(BD)	(2)(3)(10)	X	X	X	X	X	X	X	X	X

Large Count Splice Cabinets

			<u>BD6000</u>	<u>BD8000</u>	<u>BD10000</u>
RELTEC	(UPCBD)	(2)(3)(10)(14)	-	X	-

See page 2.5.2 for notes.

Manufacturer

Designation

se - Buried Plant Housings
(Complies with 7 CFR 1755.910)

Type BDS Serving Area Interface Cabinet⁽⁴⁾

	<u>Terminal Type</u>				<u>Modules or Blocks</u>
		<u>BDS100</u>	<u>BDS200</u>	<u>BDS300</u>	<u>Size by Pair Count</u> ⁽⁵⁾
Hub Fabricating Company	HubSnap or Binding Post ⁽¹³⁾	BTS1200 ⁽¹²⁾ BK/BL 1200 ⁽¹¹⁾	BTS1800 ⁽¹²⁾ BK/BL 1800 ⁽¹¹⁾	BTS5400 ⁽¹²⁾ BK/BL 2700 ⁽¹¹⁾	25,50 25,50
	3M	3M Module 3M SS Block	4065 ⁽⁶⁾ 4365 ⁽⁶⁾	4082 4382	4086 4386
RELTEC	3M Module	UPC/BDS-100	UPC/BDS-200	UPC/BDS-300	25
	Reliable Block	UPC/BDS-100	UPC/BDS-200	UPC/BDS-300	25
	RLS Module	RSK600AA	RSK900AA	SS1200AA	10,25,50
	RLS Module	FSDRLS600	FSDRLS1200	FSDRLS1800	10,25,50
	RLS Module	FSLCRLS200	-	-	50

Fiber Optic Splice Case Housings

	<u>Stake Mounted</u>	<u>Pad Mounted</u>	<u>Pole Mounted</u>
Champion Products	OFC-BD7 ⁽⁸⁾⁽⁹⁾	OFC-BD7 ⁽⁸⁾⁽⁹⁾	OFC-BD7 ⁽⁸⁾
RELTEC	OPFO-BD7PD ⁽⁸⁾⁽⁹⁾	OPFO-BD7PD ⁽⁸⁾⁽⁹⁾	OPFO-BD7PL ⁽⁸⁾

- Notes:**
- (1) Internal offset brackets for the BD3, BD4, and BD5 sizes are available upon request.
 - (2) Grounding connectors for field mounting within the housings for terminating #6 AWG solid copper ground wire are available upon request.
 - (3) Good housekeeping panels are available upon request, sizes BD3 and above. When ordering, suffix the catalog number with the letter "H".
 - (4) SAI housings equipped with two doors, front and back are also available upon request.
 - (5) Use the block or module recommended by the SAI manufacturer.
 - (6) May be pole mounted.
 - (7) BD7 may be pad mounted.
 - (8) Order mounting hardware for the intended splice case in accordance with the manufacturer's instructions.
 - (9) Order pad or stake mounting hardware in accordance with the manufacturer's instructions.
 - (10) For additional bonding and grounding requirements, extension brackets GBREXT, GBREXTKIT, and GBRALT are available upon request.
 - (11) Pole Mounted Only.
 - (12) For low-profile, order prefix BTS-LP.
 - (13) The binding post terminal is available in 100 pair only.
 - (14) UPCBD8000 may be stake mounted.
 - (15) These pedestals are type "M" pedestals (dome) that meet the functional criteria of type "H" pedestals.

2.5.3
1-99
sj

Manufacturer

Designation

sj - Wall Mountable Central Office Splice Housings⁽²⁾

(splice housings for copper cables)

	<u>Catalog Number</u>	<u>Tip Cable Openings</u>	<u>Cable Capacity</u>
RELTEC Corp.	CRF54ARV ⁽¹⁾	54	5400
(Reliable Electric)	CRF66ARV ⁽¹⁾	66	6600

(splice housings for fiber optic cables)

	<u>Catalog Number</u>	<u>Mech. Splices</u>	<u>Fiber Capacity</u> <u>Fusion Splices</u>
ADC	FPL-SR2000 ⁽¹⁾	96	96
3M	8570 ⁽¹⁾	144	192
Fiber Optic Network Solutions Corp.	WSU-72 ⁽³⁾	72	72

See page 2.5.4 for notes.

Manufacturer

Designation

sj - Wall Mountable Central Office Splice Housings⁽²⁾

(splice housings with patch panels for fiber optic cables)

	<u>Catalog Number</u>	<u>Max. Fiber Terminations</u>
ADC	FIP ⁽³⁾⁽⁵⁾	12
	FIPL ⁽³⁾⁽⁵⁾	24
	FDP ⁽¹⁾	24
	FMPS ⁽¹⁾⁽⁴⁾	36
	FMPL ⁽¹⁾⁽⁴⁾	72
	FCO-08 ⁽⁵⁾	8
	FCP-12 ⁽⁵⁾	12
3M	8432 ⁽¹⁾	12
	8434 ⁽¹⁾	24
	8436 ⁽¹⁾	48
Fiber Optic Network Solutions Corporation	LX-1012 ⁽³⁾	12
	LX-1024 ⁽³⁾	24
	LX-1048 ⁽³⁾	48
	LX-1096 ⁽³⁾	96
	LX-2012 ⁽⁴⁾	12
	LX-2024 ⁽⁴⁾	24
	LX-2036 ⁽⁴⁾	36
	LX-2048 ⁽⁴⁾	48
	LX-2072 ⁽⁴⁾	72
LX-2144 ⁽⁴⁾	144	
Porta Systems	CPS-12 ⁽⁵⁾	12
	CPS-24 ⁽⁵⁾	24
	FOCUS ⁽¹⁾	48
	FOCUS ⁽¹⁾	72

Notes: ⁽¹⁾ Recommended for use only in central offices with restricted access to unauthorized personnel.

⁽²⁾ Consult the manufacturer for ordering procedures concerning splice capacity, connector options, pigtails, or jumpers and stub options.

⁽³⁾ Accepted for wall mounting only.

⁽⁴⁾ Accepted for rack mounting only.

⁽⁵⁾ UL listed and may also be used as a Fiber Optic Cable Building Entrance Terminal.

Manufacturer

sk - Pedestal Restricted Access Inserts⁽¹⁾

	<u>Catalog No.</u>	<u>Max. Splice Diameter</u>	<u>Maximum Splice Sizes</u>	
			<u>25xModules</u>	<u>Single Pair Connector</u>
3M	4604	64mm (2.5 in.)	100-Pair	50-Pair
	4606	99mm (3.9 in.)	300-Pair	100-Pair
	4608	135mm (5.3 in.)	600-Pair	300-Pair
	4608XL	135mm (5.3 in.)	900-Pair	400-Pair
	4634	57mm (2.25 in.)	100-Pair	50-Pair
	4635	102mm (4.0 in.)	300-Pair	100-Pair
	4636	137mm (5.4 in.)	600-Pair	300-Pair
	4636-XL	140mm (5.5 in.)	900-Pair	400-Pair
	4637-XL	191mm (7.5 in.)	1200-Pair	400-Pair
	Preformed Line Products	8006258	69mm (2.75 in.)	200-Pair
8006259		114mm (4.5 in.)	400-Pair	400-Pair
8006260		171mm (6.75 in.)	900-Pair	900-Pair
Raychem	RE-2	48mm (1.9 in.)	50-Pair	50-Pair
	RE-3	76mm (3.0 in.)	200-Pair	200-Pair
	RE-4	84mm (3.3 in.)	400-Pair	400-Pair
	RE-6	114mm (4.5 in.)	900-Pair	900-Pair
	GT-3 ⁽²⁾	66mm (2.6 in.)	100-Pair	100-Pair
	GT-4 ⁽²⁾	91mm (3.6 in.)	600-Pair	600-Pair
	GT-6 ⁽²⁾	109mm (4.3 in.)	900-Pair	900-Pair
RELTEC Corp. (Reliable Electric)	RSR3100	63.5mm (2.5 in.)	150-Pair	150-Pair
	RSR4200	63.5mm x 101.6mm (2.5 in. x 4 in.)	225-Pair	225-Pair
Uraseal	SAP-IICPR3N	76mm (3.0 in.)	200-Pair	200-Pair
	SAP-IICPR4N	102mm (4.0 in.)	300-Pair	300-Pair
	SAP-IICPR5N	127mm (5.0 in.)	400-Pair	400-Pair

Notes: (1) Pedestal restricted inserts should not be filled. Splices that require filling should be placed in a splice case.

(2) Not recommended for areas susceptible to temporary flooding.

Manufacturer

Catalog Number

ps - Buried Plant Housing Sealer

Courtaulds Aerospace	Semco PR-820-2	62 Cu. In.
	Semco PR-820-6	224 " "
	Semco PR-820-8	336 " "
	Semco PR-820-20	805 " "
	Semco PR-820	4200 " "
W. R. Grace	Polycel 100	
J.A.D.E., Ltd.	PIG 375 3 oz Volume	54 " "
	" 470 4 " "	84 " "
	" 650 6 " "	126 " "
	" 825 8 " "	171 " "
	" 1050 10 " "	324 " "
	" 1080 16 " "	540 " "
3M	4411 - A Bag	45 " "
	B Bag	95 " "
	C Bag	250 " "
	750 Gram Can	450 " "

sp - Duct Sealer

Courtaulds Aerospace	Semco PR-821-2	27 Cu. In.
	Semco PR-821-6	75 " "
	Semco PR-821-8	110 " "
	Semco PR-821-20	317 " "
	Semco PR-821-1	3337 " "
3M	4416	

2.7
1-99
hm

<u>Manufacturer</u>	<u>Base Size</u>	<u>Catalog Number</u>
<u>hm - Precast Concrete Manholes</u> (3)		
Advance Concrete Products	12' x 5' x 6'-6"	A Manhole
	12' x 6' x 7'	A-1 "
	8' x 4' x 6'	SA "
	8' x 4' x 6'	SJ "
	12' x 6' x 7'	J3-1 "
	12' x 6' x 7'	High-Mount T Carrier Manhole
	12' x 6' x 9'-6"	Manhole
	4' x 4' x 6'-9"	Telephone Vault
Amcor Inc.	3.5' x 5' x 3'	UV 3.553-REA-H
	3.5' x 5' x 3'	UV 3.553-REA-L
	4' x 6' x 7'	UVMB467
	6' x 8' x 7'	UVMB687-PM
	6' x 12' x 7'	UVMB6127
Brooks Products	4' x 4'	REA 300FPB42T
	4' x 8'	REA 4080FM72
	4'-6" x 8'-6"	REA 510FM78
	5' x 10'-6"	REA 650FM78
	5' x 12'	REA 6000FM78
	6' x 12'	REA 6000FM84
	6' x 12'	REA 6000DM84
Capitol Concrete Products, Inc.	4' x 8' x 3'	CCPMH 483
	4' x 8' x 6'	CCPMH 486
	4' x 8' x 7'	CCPMH 487
	4' x 8' x 8'	CCPMH 488
Dalworth Quikset	3' x 5'	305
	4' x 4'	404
	4' x 5'-6"	406.5
	4' x 8'	408
	4' x 8'-6"	408A
	4' x 7'	507
	5' x 12'	512
	6' x 12'	612
	6' x 14'-9"	614
	6' x 15'	615
	7' x 7'	707
	8' x 10'	810
	12' x 12'	1212

See page 2.7.3 for notes.

<u>Manufacturer</u>	<u>Base Size</u>	<u>Catalog Number</u>
<u>hm - Precast Concrete Manholes⁽³⁾</u>		
DeKalb Concrete Products Inc.	2' x 2'	REA 222
	3' x 3'	REA 333
	4' x 4'	REA 444
	5' x 5'	REA 555
	6' x 6'	REA 666
	4' x 8'	REA 48-6
	5' x 10'-6"	REA 5106-6
	6' x 12'	REA 612-7
	8'-10" x 8'-10"	REA 810-810
	6' x 15'	REA 615-9
	12' x 12'	REA 1212
	Elk River Concrete Products Company of Montana	5' x 5'-2"
5' x 5'-2"		EV 505.2-D
5' x 9'-3"		EV 509.3-S
5' x 9'-3"		EV 509.3-D
5' x 13'-4"		EV 513.4-S
5' x 13'-4"		EV 513.4-D
4' x 6'		EV 406
48" ROUND	EV 48-D	
Foley-Brogdon	2' x 2'	Model 222
	3' x 3'	Model 333
	4'-2" x 4'-2"	Model 444
	6' x 6'	Model 6060
	4'-6" x 8'-6"	Model 8545
	5' x 10'-6"	Model 1050
	5' x 10'-6"	Model 1050S
	6' x 8'	Model 8060
	6' x 12'	Model 1260
	8' x 8'	Model 8080
	9' x 12'	Model 1290
6' x 10'	Model 1060	
Hartford Concrete Products ⁽²⁾	5' x 10'	REA 10-5 Series ⁽²⁾
	4' x 8'	REA 8-4 Series
	4' x 4'	REA 4-4-4
Hawaii Precast, Inc.	3' x 5'	3x5
	4' x 5'-6"	4x6
	5' x 10'-6"	5x10
	6' x 12'	6x12
Jensen Pre-Cast Concrete Products Co.	3' x 5' x 3'	REA 3660-TA
	3' x 6' x 3'	REA 3672-TA
	4' x 4' x 4'	REA 4848
	4' x 6'-6" x 3'	REA 466-TA
	4'-6" x 8'-6" x 6'-6"	REA PTS-65
	5' x 10'-6" x 7'	REA 38-5706-U-7
	6' x 12' x 7'	REA 384-4046-1
	6' x variable x 9'	REA PTS-69
6' x variable x 9'	REA PTS-69-I	

See page 2.7.3 for notes.

2.7.2
1-99
hm

<u>Manufacturer</u>	<u>Base Size</u>	<u>Catalog Number</u>
<u>hm - Precast Concrete Manholes</u> ⁽³⁾		
A.C. Miller Concrete Products Inc.	3' x 3'	REA-3x3
	4' x 4'	REA-4x4
	4' x 6'	REA-4x6
	4' x 7'-9"	REA-18
	4'-6" x 10'-6"	REA-20
	5' x 12'	REA-38Y
	6' x 12'	REA-38Y
	6' x 6'	REA-6x6
	6' x 8'	REA-6x8
	5' x 10'-6"	REA-5x10.6
	8' x 8'	REA-8x8
	10' x 10'	REA-10x10
Ornamental Poles, Inc.	6'-0" x 12'-0"	REA-Y
Pre Cast Concrete Company, Inc.	5'-10" x 10'-4" x 7'2"	Type AA
Pre-Cast Manufacturing Company	3'-6" x 6'	T-36656
	6' x 12'	T-6127
	5' x 10'	T-5107
R.C.P. Vaults (Division of Pacific International Pipe & Engineering, Inc.)	2'6" x 2'6" x 2'	76649 Handhole
	2'3" x 5'2-1/2" x 2'6"	25-TA Splicing Vault
	4'0" x 6'0" x 6'0"	466-TA
	5'0" x 9'0" x 7'2"	4484-TA
	5'0" x 9'0" x 7'2"	4484-TCA
	5'8" x 11'2" x 7'5"	5106-TA
	5'8" x 11'2" x 7'5"	5106-TCA
	6'0" x 12'0" x 7'0"	612-TA
	6'0" x 12'0" x 7'0"	612-TCA
	7'0" x 12'0" x 7'6"	712-CLS
	8'0" x 14'0"	814 (3)
Rotondo Precast	2' x 2'	RUS-22-
	3' x 3'	RUS-33-
	4' x 4'	RUS-44-
	4' x 6'	RUS-46-
	6' x 6'	RUS-66-
	6' x 8'	RUS-68-
	6' x 10'	RUS-610-
	6' x 12'	RUS-612- -38Y
	6' x 12'	RUS-6127- -OB
	6' x 12'	RUS-6127- -SB
	8' x 8'	RUS-88-
Southeast Precast Concrete Products Inc.	6' x 12'	REA 127
	4' x 8'	REA 86
	5' x 10'	REA 510
	4' x 4'	REA 504

See page 2.7.3 for notes.

<u>Manufacturer</u>	<u>Base Size</u>	<u>Catalog Number</u>	
<u>hm - Precast Concrete Manholes⁽³⁾</u>			
Utility Concrete	3' x 4' x 4'	34 1/4	
	8' x 4' x 6'	84 1/4	
	22" x 22" x 36"	23 6/8	
	2' x 2' x 2'-10"	22 2/10	
	4' x 4' x 4'	44 1/4	
	4' x 4' x 6'	44 3/4	
	10' x 5' x 7'	105 1/4	
	12' x 6' x 7'	126 1/16	
	12' x 6' x 10'	126 3/16	
	12' x 6' x 12'	126 5/16	
	15' x 6' x 9'	156 1/4	
	15' x 6' x 12'-6"	156 2/4	
	Utility Precast Inc.	6' x 12'	A Series
		5' x 10'	B Series
4-1/2' x 8-1/2'		C Series	
Utility Vault	4' x 6'	466TA	
	4'- 2" x 4'-2"	504-LA	
	4'- 2" x 6'-6"	577-LA	
	5'-10" x 10'-10"	510Y	
	6'-10" x 12'-10"	38-612-Y	
	2'3" x 5'2 1/2" x 2'4"	25 TA	
	2'3" x 5'2 1/2" x 3'4"	253 TA	
	3'1" x 6'7" x 4'1 1/2"	264 TA	
	5' x 9' x 7'2"	4484-type	
	5'4" x 9'4" x 7'6"	4686-type	
	5'8" x 11'2" x 7'2"	5106-type	
	6'1" x 11'7" x 7'5"	38Y-type	
	8'8" x 10'8" x 8'6"	810 TA	
	7'10" x 12'11" x 8'7"	712 LA	
	8' x 14' x 6'6" through 12'	814-66 TA through 814-12 TA	
	8' x 18' x 6'6" through 12'	818-66 TA through 818-12 TA	
	3'8" x 5'8" x 4'9 1/2"	GTE35 Pullbox	
3'8" x 5'8" x 4'9 1/2"	GTE Intercept Pullbox		
4'10" x 6'10" x 7'6"	467-TA		
(Condux International TM)	12' x 6'	A4046-1	
Winnebago Concrete Products	12' x 6'	J4046-3	
Janesville Concrete Products	10' x 5'-6"	L4046-4	
Chicago Pre-Cast Products	8'-6" x 10'-2"	T4046-5	
	8' to 11' x 4' to 6'	C4046-6	
	5' x 8' x 6'-6"	A4046-13	

- Notes:** (1) These manholes come equipped with Alhambra Foundry A1083 cover or equivalent.
(2) Equipped with 27-inch frame and cover made by Dewery Brothers Foundry.
(3) Consult manufacturer for ordering procedure concerning depth of the hole (Headroom), type of manhole (A, J, L, T), and extension sections.

2.8
1-99
sd

Manufacturer

Catalog Number

sd - Mobile Home Posts

Champion Metal Products	F-R8305(5)	-
Coil Sales	3518 (Internally mounted protector)	3519 (Trailer mounted protector)
Garrett Mfg. Co.(2)(3)	GMHP-36(2)(3) GUMP-36(2)(3) IMP-36(4)	GMHP-48 (3" x 6" plate)(2)(3) GUMP-48 (3" x 12" plate)(2)(3) IMP-48 (6" x 12" plate)(4)
Indiana Pressed Steel	THP-1E(1)	-
RELTEC Corp. (Reliable Electric)	UNIPOST(5)	-

- Notes:** (1)Limited to use in noncorrosive areas only.
(2)Additional 3" x 12" plates are also available.
(3)Specify color - for green (gn) - for orange (on).
(4)Available in light green only.
(5)Adjustable to 3 feet, 3-1/2 feet, and 4 feet.

Manufacturer

Catalog Number

wt - Pole Mounted Wire Terminals

wt-a Unprotected Filled Blocks

	<u>Variable</u>	<u>1-Pair</u>	<u>10-Pair</u>	<u>25-Pair</u>	<u>50-Pair</u>
AMP, Inc.	--	--	--	775164-1 ⁽¹⁾	--
Communications Technology Corporation	--	--	--	C-2516 ⁽¹⁾	C-2518 ⁽¹⁾
Raychem (D Terminator 2)	DT2-STM-HSG-1L ⁽³⁾	--	PMT-10-FS ⁽¹⁾ -REA	PMT-25-FS ⁽¹⁾ -REA	PMT-50-FS ⁽¹⁾ -REA
RELTEC	--	5533G	--	--	--

wt-b Protected Filled Blocks

	<u>25-Pair</u>
Communications Technology Corporation	C-2517 ⁽¹⁾⁽²⁾

Note: (1) Order stub cable length in accordance with manufacturer's instructions.

(2) These protected blocks use the RELTEC Corporation (Reliable Electric) 1557 (R-800) cable-class "medium duty" arrester.

(3) May be ordered with one to ten Site Term Modules.

	<u>Item</u> <u>Designation</u>	<u>Page</u>
Connectors, shield bonding.....	gh.....	3.1
" splicing and cross-connecting.....	cm.....	3.1.1
Harnesses, bonding connector.....	gs.....	3.3
Markers, cable.....	tm.....	3.2
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Repellent, ant.....	ap.....	3.5
" rodent.....	rp.....	3.5
Signs, warning.....	sm.....	3.6
Sleeves, filled plastic.....	sv.....	3.4

Manufacturer

Catalog Number

gh - Shield Bonding Connectors

(Complies with PE-33)

gh-a Copper Cable and Wire Connectors

Cable Connectors

Service Wire Connectors

Outside Cable Diameters

	<u>Less than 1.0 inch</u>	<u>1.0 to 1.5 inch</u>	<u>Greater than 1.5 inch</u>	
A.K. Stamping	400-366-332 ⁽⁴⁾ (8544 B Bond #1)	400-366-340	400-366-357 (8544 B Bond #2)	- (8544 B Bond #3)
Electric Motion	-	-	-	EM-3956____(1)(5)
Hubbell Premise Wiring	BC-285-S ⁽²⁾ BC-285-SB ⁽³⁾	BC-875-SB	BC-875-SB	BC-285 ⁽¹⁾ BC-285-S ⁽²⁾ BC-285-SB ⁽³⁾
3M	4462SN	4462SN	4462SN	-
Preformed Line Products	-	-	-	8000733 ⁽¹⁾ (Servi-Bond)

gh-b Armored Fiber Optic Cable Connectors

Outside Cable Diameters

	<u>Less than 0.75 inch</u>	<u>Greater than 0.75 inch</u>
A.K. Stamping	400366332-MB (Mini B Bond)	-
3M	4460D ⁽⁶⁾ 4460DFO ⁽⁷⁾	4460D ⁽⁶⁾ 4460DFO ⁽⁷⁾

- Notes:**
- (1) For use only at station protector.
 - (2) For use with ring terminal harness wires.
 - (3) For use with braid harness wires.
 - (4) Not to be used on cables less than 0.50 inches in diameter.
 - (5) Replace blank with either the letters H, R, RO, RR, RW, or RLB to indicate the type of mounting bracket to be used with the protector of the Network Interface Device (NID)
 - (6) To be used with armored fiber optic cables using the central strength member design.
 - (7) To be used with armored fiber optic cables using the strength member embedded in the outer jacket design.

3.1.1
1-99
cm

Manufacturer

Catalog Number

cm - Connectors and Cross-Connecting Blocks

Splicing Connectors for Copper Conductors⁽²⁾

Splicing Connectors (1 Conductor)

	<u>Moisture Resistant</u>	<u>Nonmoisture Resistant⁽¹⁾</u>
AMP	552678-2(3 wts) 552795-2 553017-2 (Half-Tap ts)	552795-4
3M Company	Scotchlok™ UR2 " UCC ⁽⁵⁾ " UY2 " UB2A " 211	Scotchlok™ UG

Splicing Connectors (1-Pair)

	<u>Moisture Resistant</u>	<u>Nonmoisture Resistant⁽¹⁾</u>
AT&T Technologies	709	--

Connector Modules (5-Pair)

	<u>Straight Splice</u>	<u>Bridge Splice</u>	<u>Half-Tap Splice</u>
AT&T (22-26 Awg) Technologies ⁽⁶⁾ (19-24 Awg)	710-SC1-5 710-SAL-5	710-BC1-5 710-BAL-5	710-TC1-5 710-TAL-5

Connector Modules (10-Pair)

	<u>Straight Splice</u>	<u>Bridge Splice</u>	<u>Half-Tap Splice</u>
AT&T (22-26 Awg) Technologies ⁽⁶⁾ (19-24 Awg)	710-SC1-10 710-SCL-10	710-BC1-10 710-BCL-10	710-TC1-10 710-TCL-10

Connector Modules (25-Pair)

	<u>Straight Splice</u>	<u>Bridge Splice</u>	<u>Half-Tap Splice</u>
AT&T (22-26 Awg) Technologies (19-24 Awg)	710-SC1-25 710-SCL-25	710-BC1-25 710-BC1-25	710-TC1-25 710-TCL-25
3M Company	4000-D/TR 4000-DT/TR 4075-S ⁽³⁾	4005-DPM/TR 4077-A ⁽³⁾ 4077-B ⁽³⁾ 4077-C ⁽³⁾ 4077-D ⁽³⁾	4008-D/TR 4075-S ⁽³⁾

See page 3.1.3 for notes.

Manufacturer

Catalog Number

cm - Connectors and Cross-Connecting Blocks

Splicing Connectors for Copper Conductors⁽²⁾

	<u>Cross-Connecting Modules (10-Pair)</u>		
	<u>Feeder</u> (Green)	<u>Distribution</u> (Blue)	<u>Carrier</u> (Red or Yellow)
RELTEC Corp. (Reliable Electric)	RLS10G	RLS10B	RLS10R

	<u>Cross-Connecting Modules (25-Pair)</u>		
	<u>Feeder</u> (Green)	<u>Distribution</u> (Blue)	<u>Carrier</u> (Red or Yellow)
3M Company ⁽³⁾	4010-E	4011-E	4012-E
RELTEC Corp. (Reliable Electric)	RLS25G	RLS25B	RLS25R

	<u>Cross-Connecting Modules (50-Pair)</u>		
	<u>Feeder</u> (Green)	<u>Distribution</u> (Blue)	<u>Carrier</u> (Red or Yellow)
RELTEC Corp. (Reliable Electric)	RLS50G	RLS50B	RLS50R

	<u>Cross-Connecting Screw Blocks⁽⁴⁾</u>	
	<u>25-Pair</u>	
3M Company		4320 SS-25
RELTEC Corp. (Reliable Electric)		BT 1-25

	<u>Splicing Connectors for Optical Fibers</u>		
	<u>Passive</u>	<u>Tunable</u>	<u>Mass</u>
3M Company	2525-A ⁽⁷⁾	-	-
	2590-A ⁽⁸⁾	-	-

See page 3.1.3 for notes.

- Notes:**
- (1) Nonmoisture resistant connectors are to be used only on plastic-insulated nonfilled cables utilizing airtight splice enclosures and when moisture protection is provided by pressurization.
 - (2) Connectors in strip form may be used. Always use tool recommended by the manufacturer.
 - (3) All listed 3M modules shall use the appropriate grease boxes (4075-S, 4077-A, 4077-B, 4077-C, or 4077-D) in all applications except pressurized cables.
 - (4) Use block size recommended by the SAIC manufacturer. Color code by label only.
 - (5) For clearing and capping only.
 - (6) Not to be used on 19-gauge waterproof cable with solid polypropylene or high density polyethylene insulated conductors.
 - (7) For splicing 250 micron fiber to 250 micron fiber.
 - (8) For splicing 250 micron fiber to 900 micron fiber.

Manufacturer

Catalog Number

tm - Cable Markers

Color-Coded Tags

Brady
Hickory Printing Group, Inc.
U.G. Products

B-871⁽²⁾
PC-2⁽³⁾
100⁽¹⁾

Write-On

Brady
LEM
Panduit Corp.
Thomas & Betts Corp.

PWC-PK
PPCL-BW
PSCB
WM-BW3
WM-BW5

Notes: (1)The catalog number is suffixed with the letter R, B, or W to indicate Red, Blue or White bands.

(2)The catalog number is suffixed with the letter B, G or Y to indicate Blue, Green or Yellow color coded tags.

(3)The catalog number is suffixed with the letter B, G, W or Y to indicate Blue, Green, White or Yellow color coded tags.

Manufacturer

Catalog Number

gs - Bonding Connector Harnesses

gs-a - #6 AWG Stranded Harness Wires

Bonding in Aerial, Buried or Underground Splice Cases,
and Ready-Access Enclosures

	<u>Noninsulated</u>			<u>Insulated</u>		
	<u>10" Length</u>	<u>20" Length</u>	<u>22" Length</u>	<u>10" Length</u>	<u>20" Length</u>	<u>22" Length</u>
Electric Motion Company	EM8100-10B.10	EM8100-20B.10	EM8100-22B.10	EM8100-10.10	EM8100-20.10	EM8100-22.10
LSW	LSW 6-10	LSW 6-20	LSW 6-22	LSW 6-10C	LSW 6-20C	LSW 6-22C

Bonding in Buried Plant Housings

	<u>Noninsulated</u>			<u>Insulated</u>		
	<u>6" Length</u>	<u>11" Length</u>	<u>18" Length</u>	<u>6" Length</u>	<u>11" Length</u>	<u>18" Length</u>
Electric Motion Company	EM8100-6B.10	EM8100.11B.10	EM8100-18B.10	EM8100-6.10	EM8100.11.10	EM8100-18.10
LSW	LSW 6-06	LSW 6-11	LSW 6-18	LSW 6-06C	LSW 6-11C	LSW 6-18C

gs-b - #6 AWG Braid

Bonding in Aerial, Buried, or Underground Splice Cases,
Ready-Access Enclosures, and Buried Plant Housings

	<u>Noninsulated</u>	<u>Insulated</u>
A.K. Stamping	A1163	-
Electric Motion Company	EM-2050	EM-2051
Excelco	579203-25	-
3M	25T ⁽⁴⁾	25/4467 ⁽⁴⁾

See page 3.3.1 for notes.

Manufacturer

Catalog Number

gs - Bonding Connector Harnesses
(Stranded Type Wire)

Buried Service Wire (Bare Metal Shields Only)

gs-a - #14 AWG Insulated Harness Wires

Bonding at Station Protector (Network Interface Device)

	<u>7" Length</u>
Electric Motion Company	EM1407TFFR(1)
Engineered Products Co.	EH-13(1)
LSW	LSW-5(1)
Preformed Line Products	8000739(2)
Siecor (CAC)	GH-13(1)

gs-b - #6 AWG Insulated Harness Wires

Bonding in Buried Plant Housings

	<u>15" Length</u>	<u>36" Length</u>
Electric Motion Company	EM3955-6L/8100-15(3)	EM3955-6L/8100-36(3)

- Notes:**
- (1) Harnesses equipped with AMP's #329860 Termini-Foil[®] connector at one end for attachment to the bare metal shield of the service wire.
 - (2) Harnesses equipped with Preformed Line Products' 8000733 connector at one end for attachment to the bare metal shield of the service wire.
 - (3) Harnesses equipped with Electric Motion's EM3955 connector at one end for attachment to the bare metal shield of the service wire.
 - (4) When ordering, state 3-inch eyelets.

3.4
1-99
sv

Manufacturer

Catalog Number

sv - Filled Plastic Sleeves

Jameson (W. G. Pearson)

Order by size and description

Note: Splicing connectors and plastic sleeves are to be used only on conductor sizes and types and splicing arrangements as recommended by the connector and sleeve manufacturers.

Manufacturer

Catalog Number

sm - Buried Plant Warning Signs, Stakes and Decal Markings

sm-a Decal Type Warning Signs and Markings⁽¹⁾⁽²⁾

	<u>Non-Reflective</u>		
	<u>Warning Signs</u>	<u>Numerals & Letters</u>	<u>Symbols</u>
ACP International	X	X	-
Michael J. Arnold & Co. (11)	X	X	X
W. H. Brady	X	X	-
Color Arts, Inc.	X	X	-
May Advertising Corp.	X	X	-
3M Company	X	X	-
RELTEC Corp. (Reliable Electric)	X	X	-
Vernon Company	X	-	-
Vulcan Signs	X	X	-

sm-b Decal Type Warning Signs and Markings⁽¹⁾⁽²⁾

	<u>Reflective</u>		
	<u>Warning Signs</u>	<u>Numerals & Letters</u>	<u>Symbols</u>
ACP International	CBC36RY CBC36RO	CBC36RY CBC36RO	-
Michael J. Arnold & Co. (11)	MJADWR	MJAD__ ⁽¹²⁾ R	MJADSR
W. H. Brady	-	5905 Series	-
William Frick & Co.	CAUT-BC/IND	REF1.5 ⁽⁵⁾⁽¹⁶⁾ OREF1.5 ⁽⁶⁾⁽¹⁶⁾ REF3T ⁽⁵⁾ OREF3T ⁽⁶⁾	
3M Company	-	No. 5000 ⁽⁵⁾ No. 5005 ⁽⁶⁾ No. 5025 ⁽⁶⁾	No. 5002
Vulcan Signs	UCM Series	UEC Series	-

See page 3.5.3 for notes.

Manufacturer

Catalog Number

sm - Buried Plant Warning Signs, Stakes and Decal Markings

sm-c Signs and Stakes

	<u>Cable Splice</u>	<u>Cable Route</u>	<u>Warning</u>
ACP International ⁽³⁾	-	-	ACP-BM-53
Michael J. Arnold & Co. ⁽³⁾⁽⁴⁾	MJABCSA -	MJA930615 ⁽¹³⁾ -	MJACBC MJA__ ⁽¹⁴⁾
W. H. Brady	B-11 ⁽³⁾ - -	B-13 ⁽³⁾ - -	B-12 ⁽³⁾ BL1 BL2
Carsonite	-	-	Impactor
Decal Industries ⁽⁴⁾	-	-	FP__ ⁽⁷⁾ -__ ⁽⁸⁾ D__ ⁽⁹⁾
William Frick & Co. ⁽³⁾⁽⁴⁾	BC-SPLICE	CABLE-RT	BC-CAUTION
GreenLine ⁽⁴⁾	-	-	FLU1RD96016
Lyle Signs Inc. ⁽³⁾⁽⁴⁾	UT-55	UT-54	UT-53
Maloney Technical Products ⁽⁶⁾	-	-	MRKR™
May Advertising Corp. ⁽³⁾⁽⁴⁾	BM55-MABCS 412	BM54-MACR 412	BM53-MABC 412
J. Miller Industries, Inc. ⁽⁶⁾	-	-	JMI-375-096-OR-100
RELTEC Corp. (Reliable Electric) ⁽³⁾	1SP41233	1SP41232	1SP4121
Repnet	REA/PSA-1	REA/PSA-2	REA/PSA-3
Rustproof Signs, Inc. ⁽³⁾	R-709 -	R-710 -	R-708 R-666
SArgent-SOwell ⁽³⁾	49PHV067	49PHV069	49PHV068
Vulcan Signs ⁽³⁾⁽⁴⁾	UCM-102	UCM-101	UCM-505

See page 3.5.3 for notes.

Manufacturer

Catalog Number

sm - Buried Plant Warning Signs, Stakes and Decal Markings

sm-c Signs and Stakes

Mounting Stakes

Michael J. Arnold & Co.	UPC-8__ (15)
W. H. Brady	96920
Carsonite	CUM-375
Decal Industries	FP__ (7)-__ (9)
William Frick & Co.	POST-8FT(17)
FlexStake	302 303 304 305
GreenLine	FLU1-96
J. Miller Industries, Inc.	JMI-375-096-OR
RELTEC Corp. (Reliable Electric)	UP4120__(10)
Rustproof Signs, Inc.	RP-208N
Vulcan Signs	82GR

See page 3.5.3 for notes.

- Notes:**
- (1) All decals should be applied using manufacturers recommended materials and practices.
 - (2) Order by size and description.
 - (3) Stake not included.
 - (4) Signs may be ordered with black lettering on orange background.
 - (5) Available only in black lettering on yellow background.
 - (6) Available only in black lettering on orange background.
 - (7) Blank denotes color of marker. Replace blank with W for White, O for Orange, or G for Green.
 - (8) Blank denotes number and color of decals. Replace blank with 1Y for 1 yellow decal, 2Y for 2 yellow decals, 1O for 1 orange decal, or 2O for 2 orange decals.
 - (9) Blank denotes length of marker in inches. Replace blank with 60, 66, 72, or 78.
 - (10) Blank denotes length of stake in inches. Replace blank with either 72 or 96.
 - (11) Decals may be ordered with black lettering on orange background.
 - (12) Replace blank with "N" for numerals and "L" for letters.
 - (13) Add letter "A" to catalog number to obtain sign with arrows.
 - (14) Replace blank with "TF" for tri-fold and "QF" for quad-fold.
 - (15) Replace blank with "G" for green painted and "GAL" for galvanized.
 - (16) When ordering specify either 1 decal or 4 decals per sheet.
 - (17) When ordering specify either 2 pound or 1.12 pound post.

Item
Designation

Page

Coils, loading.....no.....4.1

Manufacturer

no - Loading Coils
(Complies with PE-26)

Type Designation

Catalog Number

Standard Loading Coils

	<u>G22</u>	<u>G31</u>	<u>G32</u>	<u>G34</u>	<u>G35</u>
Coil Sales	605	605	601	605	C152
Federal Telecom	824	824	152	824	35001

Mini-Loading Coils

	<u>GM22</u>	<u>GM31</u>	<u>GM32</u>	<u>GM34</u>	<u>GM35</u>
Coil Sales	904	904	901	904	B152
Federal Telecom	824M	824M	152M	824M	35001M

Type Designations

G22 and GM22 Direct Burial Assemblies
 G31 and GM31 Strand Mount Assemblies
 G32 and GM32 Potted Assemblies
 G34 and GM34 Pole and Manhole Assemblies
 G35 and GM35 Single Coil Stackable Assemblies

Standard Sizes

25 and greater
 25 and greater
 3, 12, 18, 25
 25 and greater
 1

When ordering loading coil assemblies the appropriate type designation must be followed by a dash and a number indicating the number of coils with which the assembly is to be equipped. A second dash must be followed by either 66 or 88 indicating the inductance of the coils. Examples are indicated below:

Example 1: G34-200-66 - Indicates pole mounted assembly equipped with 200 standard coils of 66 mH inductance.

Example 2: GM34-200-66 - Indicates pole mounted assembly equipped with 200 mini-coils of 66 mH inductance.

	<u>Item</u> <u>Designation</u>	<u>Page</u>
Arresters, gas tube.....	nh.....	5.4
" secondary power.....	gi.....	5.5
Blocks, terminal, for use in pedestals.....	sh.....	5.6
Protectors, mainframe.....	nm.....	5.2
" power service.....	gg.....	5.3
" station.....	ni.....	5.1

ni - Station Protectors⁽²⁾

Fuseless, Well Mount, Carbon

<u>Manufacturer</u>	<u>1-Pair</u>	<u>2-Pair</u>	<u>4-Pair</u>	<u>6-Pair</u>
RELTEC Corp. (Reliable Electric)	351S/1304S	393-2S/1304S	393-4S/1304S	393-6S/1304S ⁽¹⁾
	<u>25-Pair</u>			<u>50-Pair</u>
RELTEC Corp. (Reliable Electric)	2BT25PMH/1304S 25P4X4MH/1304S ⁽¹⁾			2BT50PMH/1304S 50P4X4MH/1304S ⁽¹⁾

Notes:

⁽¹⁾Restricted to inside mounting.

⁽²⁾Designations after the slash "/" mark indicates the arrester unit which RUS has accepted for use in the listed protector. Unless otherwise noted, no other arrester unit is RUS accepted for use in protectors listed here.

ni - Station Protectors⁽¹⁾⁽²⁾

Fuseless, Module, Carbon

<u>Manufacturer</u>	<u>25-Pair</u>	<u>50-Pair</u>	<u>100-Pair</u>
3M ⁽³⁾	4188-25 ⁽⁴⁾ /3AB -- 4 ⁽⁵⁾ 88 ⁽⁶⁾ -25/3AB 4888 ⁽⁷⁾ -25/3AB	4188-50 ⁽⁴⁾ /3AB 4388 ⁽⁸⁾ -50/3AB 4 ⁽⁵⁾ 88 ⁽⁶⁾ -50/3AB 4888 ⁽⁷⁾ -50/3AB	4188-100 ⁽⁴⁾ /3AB 4388 ⁽⁸⁾ -100/3AB 4 ⁽⁵⁾ 88 ⁽⁶⁾ -100/3AB 4888 ⁽⁷⁾ -100/3AB
RELTEC Corp. (Reliable Electric)	--	R134C/3AB	R134C/3AB

Fused, Well Mount, Carbon

1-Pair

RELTEC Corp. (Reliable Electric)	375S/1304S
-------------------------------------	------------

- Notes:**
- (1)Restricted to inside mounting.
 - (2)Designations after the slash "/" mark indicates the arrester unit which RUS has accepted for use in the listed protector. Unless otherwise noted, no other arrester unit is RUS accepted for use in protectors listed here.
 - (3)The arrester module accepted for these protectors is the 3AB carbon arrester module manufactured by RELTEC Corp. (Reliable Electric).
 - (4)Must be supplied with 4188C-25, 50, or 100 protector covers, as appropriate to station protector size provided.
 - (5)Blank space replaced with 2, 4, 5 or 6.
 - (6)Blank space replaced with F or R.
 - (7)Blank space or blank space replaced with 2, 3, 4, 5 or 6.
 - (8)Blank space replaced with DF or DR.

ni - Station Protectors⁽⁷⁾

Fuseless, Well Mount, Gas Tube

<u>Manufacturer</u>	<u>1-Pair</u>	<u>2-Pair</u>	<u>4-Pair</u>	<u>6-Pair</u>
RELTEC Corp. (Reliable Electric)	351SVSR2/1304VSR2 ⁽¹⁾⁽⁴⁾	393-2SVSR2/1304VSR2 ⁽¹⁾⁽⁴⁾	393-4SVSR2/1304VSR2 ⁽¹⁾⁽⁴⁾	393-6SVSR2/1304VSR2 ⁽¹⁾⁽⁴⁾⁽⁶⁾
Siecor	500-LCGX/LCGX ⁽¹⁾⁽⁴⁾	502A1-2LCGX/LCGX ⁽¹⁾⁽⁴⁾	502A1-4LCGX/LCGX ⁽¹⁾⁽⁴⁾	502A1-6LCGX/LCGX ⁽¹⁾⁽⁴⁾⁽⁶⁾
	<u>25-Pair</u>			<u>50-Pair</u>
RELTEC Corp. (Reliable Electric)	2BT25VSRMH/1304VSR2 ⁽¹⁾⁽⁴⁾ 25VSR4X4MH/1304VSR2 ⁽¹⁾⁽⁴⁾⁽⁶⁾			2BT50VSRMH/1304VSR2 ⁽¹⁾⁽⁴⁾ 50VSR4X4MH/1304VSR2 ⁽¹⁾⁽⁴⁾⁽⁶⁾

- Notes:**
- (1)2-electrode.
 - (2)3-electrode.
 - (3)Medium duty.
 - (4)Heavy duty.
 - (5)Maximum duty.
 - (6)Restricted to inside mounting.
 - (7)Designations after the slash "/" mark indicates the arrester unit which RUS has accepted for use in the listed protector. Unless otherwise noted, no other arrester unit is RUS accepted for use in protectors listed here.

ni - Station Protectors⁽⁷⁾

Fuseless, Module, Gas Tube

<u>Manufacturer</u>	<u>1-Pair</u>	<u>2-Pair</u>	<u>4-Pair</u>	<u>6-Pair</u>
Joslyn	7040-01-EWR/125 EW-R ⁽¹⁾⁽⁴⁾ 7040-01/356M ⁽²⁾⁽⁴⁾	7040-02-EWR/125 EW-R ⁽¹⁾⁽⁴⁾ 7040-02/356M ⁽²⁾⁽⁴⁾	--	--
TII	3251M/355M ⁽²⁾⁽⁵⁾ 3261M/356M1 ⁽²⁾⁽⁴⁾	3252M/355M ⁽²⁾⁽⁵⁾ 3262M/356M1 ⁽²⁾⁽⁴⁾	5304M/356M1 ⁽²⁾⁽⁴⁾ 5314M/355M ⁽²⁾⁽⁵⁾	5306M/356M1 ⁽²⁾⁽⁴⁾ 5316M/355M ⁽²⁾⁽⁵⁾
	<u>25-Pair⁽⁶⁾</u>	<u>50-Pair⁽⁶⁾</u>	<u>100-Pair⁽⁶⁾</u>	
AT&T Network Systems	189-25/3B1ER ⁽¹⁾⁽⁴⁾	189-50/3B1ER ⁽¹⁾⁽⁴⁾	189-100/3B1ER ⁽¹⁾⁽⁴⁾	
3M ⁽¹⁰⁾	4188-25 ⁽¹¹⁾ /6U2VS ⁽¹⁾⁽⁴⁾ 4188-25 ⁽¹¹⁾ /3GUVS ⁽²⁾⁽³⁾ -- -- 4__ ⁽⁸⁾ 88__ ⁽⁹⁾ -25/6U2VS ⁽¹⁾⁽⁴⁾ 4__ ⁽⁸⁾ 88__ ⁽⁹⁾ -25/3GUVS ⁽²⁾⁽³⁾ 4__ ⁽¹²⁾ 88__ ⁽¹³⁾ -25/6U2VS ⁽¹⁾⁽⁴⁾ 4__ ⁽¹²⁾ 88__ ⁽¹³⁾ -25/3GUVS ⁽²⁾⁽³⁾	4188-50 ⁽¹¹⁾ /6U2VS ⁽¹⁾⁽⁴⁾ 4188-50 ⁽¹¹⁾ /3GUVS ⁽²⁾⁽³⁾ 4388-50 ⁽¹⁴⁾ /6U2VS ⁽¹⁾⁽⁴⁾ 4388-50 ⁽¹⁴⁾ /3GUVS ⁽²⁾⁽³⁾ 4__ ⁽⁸⁾ 88__ ⁽⁹⁾ -50/6U2VS ⁽¹⁾⁽⁴⁾ 4__ ⁽⁸⁾ 88__ ⁽⁹⁾ -50/3GUVS ⁽²⁾⁽³⁾ 4__ ⁽¹²⁾ 88__ ⁽¹³⁾ -50/6U2VS ⁽¹⁾⁽⁴⁾ 4__ ⁽¹²⁾ 88__ ⁽¹³⁾ -50/3GUVS ⁽²⁾⁽³⁾	4188-100 ⁽¹¹⁾ /6U2VS ⁽¹⁾⁽⁴⁾ 4188-100 ⁽¹¹⁾ /3GUVS ⁽²⁾⁽³⁾ 4388-100 ⁽¹⁴⁾ /6U2VS ⁽¹⁾⁽⁴⁾ 4388-100 ⁽¹⁴⁾ /3GUVS ⁽²⁾⁽³⁾ 4__ ⁽⁸⁾ 88__ ⁽⁹⁾ -100/6U2VS ⁽¹⁾⁽⁴⁾ 4__ ⁽⁸⁾ 88__ ⁽⁹⁾ -100/3GUVS ⁽²⁾⁽³⁾ 4__ ⁽¹²⁾ 88__ ⁽¹³⁾ -100/6U2VS ⁽¹⁾⁽⁴⁾ 4__ ⁽¹²⁾ 88__ ⁽¹³⁾ -100/3GUVS ⁽²⁾⁽³⁾	
RELTEC Corp. (Reliable Electric)	-- R134C/3GUVS ⁽²⁾⁽³⁾ BEP__ ⁽¹⁵⁾ 25__ ⁽¹⁶⁾ /__ ⁽²⁰⁾ BEPB25__ ⁽¹⁸⁾ /__ ⁽²⁰⁾ BEP__ ⁽¹⁹⁾ 25SC__ ⁽¹⁷⁾ /__ ⁽²⁰⁾	R134C/6U2VS ⁽¹⁾⁽⁴⁾ R134C/3GUVS ⁽²⁾⁽³⁾ BEP__ ⁽¹⁵⁾ 50__ ⁽¹⁶⁾ /__ ⁽²⁰⁾ BEPB50__ ⁽¹⁸⁾ /__ ⁽²⁰⁾ BEP__ ⁽¹⁹⁾ 50SC__ ⁽¹⁷⁾ /__ ⁽²⁰⁾	R134C/6U2VS ⁽¹⁾⁽⁴⁾ BEP__ ⁽¹⁵⁾ 100__ ⁽¹⁶⁾ /__ ⁽²⁰⁾ BEPB100__ ⁽¹⁸⁾ /__ ⁽²⁰⁾ BEP__ ⁽¹⁹⁾ 100SC__ ⁽¹⁷⁾ /__ ⁽²⁰⁾	
Siecor	C-552/7X ⁽¹⁾⁽⁴⁾ C-552/9X ⁽²⁾⁽⁴⁾	C-550/7X ⁽¹⁾⁽⁴⁾ C-550/9X ⁽²⁾⁽⁴⁾	C-551/7X ⁽¹⁾⁽⁴⁾ C-551/9X ⁽²⁾⁽⁴⁾	
TII	515 25/355M ⁽²⁾⁽⁵⁾ 516 25/356M1 ⁽²⁾⁽⁴⁾	--	--	

See page 5.1.4 for notes.

ni - Station Protectors⁽⁷⁾

Fused, Well Mount, Gas Tube

1-Pair

RELTEC Corp.
(Reliable Electric)

375SVSR2/1304VSR2⁽¹⁾⁽⁴⁾

- Notes:**
- (1) 2-electrode.
 - (2) 3-electrode.
 - (3) Medium duty.
 - (4) Heavy duty.
 - (5) Maximum duty.
 - (6) Restricted to inside mounting.
 - (7) Designations after the slash "/" mark indicates the arrester unit which RUS has accepted for use in the listed protector. Unless otherwise noted, no other arrester unit is RUS accepted for use in protectors listed here.
 - (8) Blank space replaced with 2, 4, 5 or 6.
 - (9) Blank space replaced with F or R.
 - (10) The arrester modules accepted for these 3M protectors are manufactured by RELTEC Corp. (Reliable Electric).
 - (11) Must be supplied with 4188C-25, 50, or 100 protector covers, as appropriate to station protector size provided.
 - (12) Blank space replaced with 8 or 9. Accepted for outdoor mounting.
 - (13) Blank space or blank space replaced with B.
 - (14) Blank space replaced with DF or DR.
 - (15) Replace the blank space with C, G, or CG.
 - (16) Replace the blank space with C, MM, CF, or FS.
 - (17) Replace the blank space with 6', 12', or 25'.
 - (18) Replace the blank space with MM, CF, or FS.
 - (19) Replace the blank space with C or CG.
 - (20) Replace the blank space with 3GUVS⁽²⁾⁽³⁾ or 6U2VS⁽¹⁾⁽⁴⁾.

nm - Mainframe Protectors⁽¹⁾⁽⁷⁾

Manufacturer

	<u>Carbon</u>		
	<u>10-Pair</u>	<u>50-Pair</u>	<u>100-Pair</u>
Porta Systems	--	--	508PF/35BCN
RELTEC Corp. (Reliable Electric)	713/3AB	--	R399/3AB
	<u>Gas Tube</u>		
	<u>10-Pair</u>	<u>50-Pair</u>	<u>100-Pair</u>
AT&T Network Systems	--	--	310/3B1ER ⁽²⁾⁽⁵⁾
Porta Systems	--	--	508PF/65BCN ⁽²⁾⁽⁵⁾
RELTEC Corp. (Reliable Electric)	R713/6A20 ⁽²⁾⁽⁵⁾ R713/3G ⁽³⁾⁽⁴⁾	--	R399/6A20 ⁽²⁾⁽⁵⁾ R399/3G ⁽³⁾⁽⁴⁾
Siecor	--	--	C-388/7A ⁽²⁾⁽⁵⁾ C-388/9A ⁽³⁾⁽⁵⁾

Solid-State⁽⁸⁾

	<u>100-Pair</u>
Circa Telecom	2500QC2-100/CT3B1FS 2500QC2-100/CT3B1S
RELTEC Corp. (Reliable Electric)	R399/S3AB
Siecor	⁽⁹⁾ /11A

- Notes:**
- ⁽¹⁾Not to be used at subscribers' premises.
 - ⁽²⁾2-electrode.
 - ⁽³⁾3-electrode.
 - ⁽⁴⁾Medium duty.
 - ⁽⁵⁾Heavy duty.
 - ⁽⁶⁾Maximum duty.
 - ⁽⁷⁾Designations after the slash "/" mark indicates the arrester unit which RUS has accepted for use in the listed protector. Unless otherwise noted, no other arrester unit is RUS accepted for use in protectors listed here.
 - ⁽⁸⁾PEG-7, Class I Category.
 - ⁽⁹⁾For use with Siecor's C-388 mainframe protector.

Manufacturer

Catalog Number

gg - Power Service Protectors

Maximum Service Voltage: 125/250

Atlantic Scientific	ZoneGuardian Plus	#42003
	" "	#43005
	" "	#43006
	ZoneGuardian Series	#35029
	" "	#35030
	" "	#35031
EFI Corporation		DPI 153
		DPI 453 Turbo ST
		EFI 153
		EFI 453 Turbo ST
Siecor		CP 211
TII		410BM
		411BM
		412BM
		422BM
Transtector		ACP100BL
		CPS 150
Tripp Lite		ISOBLOK 2-0
		ISOBAR 2-6
		" 4-6
		" 8-15

nh - Gas Tube Arrester⁽¹⁾

<u>Manufacturer</u>	<u>MDF Module</u>	<u>Station Module</u>	<u>Well Mount</u>
Joslyn	-	2022-60-A ⁽²⁾⁽⁵⁾	-
Porta Systems	-	65BCN ⁽²⁾⁽⁵⁾	-
RELTEC Corp. (Reliable Electric)	6A20 ⁽²⁾⁽⁵⁾ 3G ⁽³⁾⁽⁴⁾	6U2VS ⁽²⁾⁽⁵⁾ 3GUVS ⁽³⁾⁽⁴⁾ G1200-0-350 ⁽²⁾⁽⁵⁾	1304VSR2 ⁽²⁾⁽⁵⁾ -
Siecor	7A ⁽²⁾⁽⁵⁾ 9A ⁽³⁾⁽⁵⁾	7X ⁽²⁾⁽⁵⁾ 9X ⁽³⁾⁽⁵⁾	- -
TII	-	355M ⁽³⁾⁽⁶⁾ 356M1 ⁽³⁾⁽⁵⁾	-

nh - Solid-State Arrester⁽⁷⁾

<u>Manufacturer</u>	<u>MDF Module</u>
Circa Telecom	CT3B1FS ⁽⁸⁾⁽¹⁰⁾ CT3B1S ⁽⁸⁾⁽¹⁰⁾
Siecor	11A ⁽⁸⁾⁽⁹⁾

Notes:

⁽¹⁾Arresters listed under this category are not complete station protectors. They are intended for use as components, as accepted and listed, in the station protector "ni" and "nm" sections of the List of Materials. Arrester units here shall not be used in a station protector listed in the "ni" or "nm" section unless the same arrester unit is listed for use in the particular protector on the "ni" or "nm" pages.

⁽²⁾2-electrode.

⁽³⁾3-electrode.

⁽⁴⁾Medium duty.

⁽⁵⁾Heavy duty

⁽⁶⁾Maximum duty.

⁽⁷⁾Designations after the slash "/" mark indicates the arrester unit which RUS has accepted for use in the listed protector. Unless otherwise noted, no other arrester unit is RUS accepted for use in protectors listed here.

⁽⁸⁾PEG-7, Class I Category.

⁽⁹⁾For use with Siecor's C-388.

⁽¹⁰⁾For use with Circa Telecom's 2500QC2-100.

Manufacturer

Catalog Number

gi - Secondary Power Arresters

Main Service Voltage: 125/250

Signal and Power

Power Only

ACT Communications ⁽⁵⁾	-	452-120-XOX 452-240-XOX 453-120-XOX 453-240-XOX 453-277-XOX 453-480-XOX 454-120-XOX 454-240-XOX 455-120-XOX 455-240-XOX 455-277-XOX 455-480-XOX 472-120-XOX 472-240-XOX 473-120-XOX 473-277-XOX	
Advanced Protection Technologies	-	TE/100 TE/200 TE/300 TE/600	TE/1000 TE/2000 TE/3000 TE/6000
Approved Lightning Protection Co.	-	SA-20	
Atlantic Scientific	ZoneSentinel Series " " " " " " ZoneMaster 75 Series " " " " " " ZoneMaster 140 Series " " " " " "	#12100 #12101 #12102 #12103 #11200 #11201 #11202 #11203 #17100 #17101 #17102 #17103	
EFI Corporation	-	MBP120EFI-Y_	⁽⁴⁾
General Electric	-	9L15DCB002	

See page 5.5.2 for notes.

5.5.1
7-00
gi

Manufacturer

Catalog Number

gi - Secondary Power Arresters

Main Service Voltage:

125/250 (Cont'd)

Signal and Power

Power Only

Joslyn

-

1250-__⁽⁸⁾
1260-__⁽⁹⁾
1261-__⁽⁹⁾
1265-__⁽¹⁰⁾
1266-__⁽¹¹⁾
1450-85
1452-__⁽¹²⁾
1455-__⁽¹³⁾

Northern Technologies, Inc.

-

TCS-__-__-__(1)-__(2)
TCS-__-__-__(1)-__(2)-__(6)
SII-(7)-__(2)-__(6)

Other Service Voltages

Signal and Power

Power Only

AC Data Systems

-

Surge Blox

Advanced Protection Technologies

-

TE/400 TE/4000
TE/500 TE/5000

Atlantic Scientific

ZoneSentinel Series
" "
" "
ZoneMaster 75 Series
" "
" "
ZoneMaster 140 Series
" "
" "

#12104
#12105
#12106
#11204
#11205
#11206
#17104
#17105
#17106

Joslyn

-

1250-32-E
1263-21
1451-85
1456-__⁽¹⁴⁾

Northern Technologies, Inc.

-

TCS-__-__-__(1)-__(3)
TCS-__-__-__(1)-__(2)-__(6)
SII-(7)-__(2)-__(6)

Tesco

-

TES 1120Y

Transtector

-

ACP3000
CPS Series
APEX Series
MCP Series
SLIM LINE 120V
SLIM LINE 240V

See page 5.5.2 for notes.

- Notes:**
- (1) Four blank spaces replaced with 100, 250, 350, 500, 1000, or LAP.
 - (2) Blank space replaced with B, C, or E.
 - (3) Blank space replaced with F, G, or H.
 - (4) Blank space replaced with 1, 2, or 3.
 - (5) (X) denotes manufacturer's catalog number for optional lamps, alarming, and enclosures.
 - (6) May have optional suffix: XT, L, or XTL.
 - (7) Blank space replaced with 2, 3, or 5.
 - (8) Blank space replaced with 32, 33, or 33-E
 - (9) Blank space replaced with 21, 41, 45, or 85.
 - (10) Blank space replaced with 21, 41, 45, 85, 85-PM, or 85-PMT.
 - (11) Blank space replaced with 45 or 85.
 - (12) Blank space replaced with 21, 41, 80, 85, or 85-PM.
 - (13) Blank space replaced with 21, 41, 45, 80, 85, or 85-PM.
 - (14) Blank space replaced with 41, 45, 80, 85, or 85-PM.

Manufacturer

Catalog Number

sh - Terminal Blocks for Use in Pedestals

sh-a Unprotected Filled IDC Terminal Blocks

	<u>1-Pair (w/leads)</u>	<u>2-Pair (w/leads)</u>	<u>5-Pair (w/leads)</u>	<u>6-Pair (w/leads)</u>	<u>10-Pair (w/leads)</u>	<u>12-Pair (w/leads)</u>	<u>15-Pair (w/leads)</u>	<u>25-Pair (w/leads)</u>	<u>50-Pair (w/leads)</u>
AMP, Inc.	--	--	775132-9 ⁽⁸⁾	1-775132-3 ⁽⁸⁾	775133-5 ⁽⁸⁾	775133-9 ⁽⁸⁾	--	775136-1 ⁽⁸⁾	--
Communications Technology Corp.	--	--	54866 ^(1,5,8,9)	54867 ^(1,5,8,9)	54868 ^(1,5,8,9)	54869 ^(1,5,8,9)	54070 ^(1,5,8,9)	54071 ^(1,5,8,9)	--
			2520 ^(1,5,8)	2521 ^(1,5,8)	2522 ^(1,5,8)	2523 ^(1,5,8)	2524 ^(1,5,8)	2525 ^(1,5,8)	2526 ^(1,5,8)
			5460002 ⁽²⁾	5460102 ⁽²⁾	5460202 ⁽²⁾	5460302 ⁽²⁾	5460502 ⁽²⁾	--	--
PSI Telecom (GATM) ⁽¹⁰⁾	--	--	1D5XXXXXXXX	--	ID10XXXXXXXX	--	ID15XXXXXXXX	ID25XXXXXXXX	--
Raychem (D Terminator 2)	DT2-STM-01-MOD-ND ⁽⁴⁾	--	PTB-5-AU-4-REA	--	PTB-10-AU-4-REA	PTB-12-AU-4-REA	--	PTB-25-AU-4-REA	--
			--	--	PTB-10-FS ⁽³⁾ -REA	PTB-12-FS ⁽³⁾ -REA	--	PTB-25-FS ⁽³⁾ -REA	--
RELTEC Corp. (Reliable Electric)	--	--	RPIS5A ⁽⁵⁾	RPIS6A ⁽⁵⁾⁽⁸⁾	RPIS10A ⁽⁵⁾⁽⁸⁾	RPIS12A ⁽⁵⁾⁽⁸⁾	--	RPIS25A ⁽⁵⁾⁽⁸⁾	--
		RGIS2SLS ⁽⁴⁾	RGIS5A ⁽⁶⁾	RGIS6A ⁽⁶⁾	RGIS10A ⁽⁶⁾⁽⁸⁾	RGIS12A ⁽⁶⁾⁽⁸⁾	--	RGIS25A ⁽⁶⁾⁽⁸⁾	--
		--	--	--	--	--	--	RTIS25A ⁽⁷⁾⁽⁸⁾	--

sh-b Unprotected Filled Binding Post Terminal Blocks

	<u>1-Pair (w/leads)</u>	<u>2-Pair (w/leads)</u>	<u>5-Pair (w/leads)</u>	<u>6-Pair (w/leads)</u>	<u>10-Pair (w/leads)</u>	<u>12-Pair (w/leads)</u>	<u>15-Pair (w/leads)</u>	<u>25-Pair (w/leads)</u>	<u>50-Pair (w/leads)</u>
RELTEC Corp.	--	--	RPT5A4G ⁽¹⁾	--	RPT10A4G ⁽¹⁾	--	--	RPT25A4G ⁽¹⁾	--
	--	--	RGT5A4G ⁽²⁾	--	RGT10A4G ⁽²⁾	--	--	RGT25A4G ⁽²⁾	--

- Notes:
- (1) E/W bottom exit pigtail stub.
 - (2) E/W rear exit pigtail stub.
 - (3) Stub cables accepted in 12 feet and 25 feet lengths using RUS accepted PE-39 or PE-89 cables. Order stub cable in accordance with manufacturer's instructions.
 - (4) Can only be ordered stubless from the manufacturer.
 - (5) E/W bottom exit pigtail stub available in 4, 12, or 25 foot lengths. Order pigtail stub in accordance with manufacturer's instructions.
 - (6) E/W rear exit pigtail stub available in 4, 12, or 25 foot lengths. Order pigtail stub in accordance with manufacturer's instructions.
 - (7) E/W top exit pigtail stub available in 4, 12, or 25 foot lengths. Order pigtail stub in accordance with manufacturer's instructions.
 - (8) Can be ordered with a filled cable stub using RUS accepted PE-39 or PE-89 cables in 4, 12, or 25 foot lengths. Order stub cable in accordance with manufacturer's instructions.
 - (9) Flat plane block for left and right side drop wire entrance.
 - (10) Contact vendor for pedestal and aerial stub options.

Manufacturer

nid - Network Interface Devices

Siecor

NI - 2000 Series

	<u>Item Designation</u>	<u>Page</u>
Carrier equipment, digital		
carrier systems.....	ec.....	6.1
Concentrator, electronic subscriber		
line.....	ep.....	6.5
Equipment, electronic subscriber line		
concentrator.....	ep.....	6.5
" ringing generator.....	gr.....	6.6
Generators, ringing.....	gr.....	6.6
Lightwave digital transmission		
systems, Asynchronous.....	lt.....	6.7
Lightwave digital transmission		
systems, Synchronous.....	lt.....	6.8
Microwave equipment.....	gm.....	6.2
Ringing generators.....	gr.....	6.6
Switching equipment, digital,		
stored program.....	pc.....	6.4
Wireless local loop systems.....	wl.....	6.3

Manufacturer

Type Designation

ec - Carrier Equipment

Digital Carrier Systems

	<u>D4 Type Trunk Carrier (PE-60a)</u>	<u>Subscriber Carrier⁽¹⁾ (PE-64a)</u>	<u>T1 Type Span Line⁽²⁾ (PE-60b)</u>	<u>Automatic Protection Switch (PE-60c)</u>
AFC	-	UMC 1000A ⁽⁶⁾	-	-
Alcatel	D448	-	T1	B302
AT&T	D4	-	-	-
CIL/Wescom	360 D4 ⁽³⁾	DuaLine Plus ⁽⁷⁾	T1	-
Conklin	-	MSSL C8000 ⁽¹⁰⁾	-	-
CSE/Vidar	-	-	T-Carrier	-
GoDigital	-	GDSL-8	-	-
Infinitec	-	Inteleflex	-	-
PairGain	-	HiGain ⁽⁹⁾	-	-
Pulsecom	-	S-24DU ⁽³⁾⁽⁸⁾	-	-
Raychem	-	Miniplex ⁽⁴⁾	-	-
Siemens Information and Communication Networks	9004 A/B	-	-	-

Notes:

(1)D2/D3 encoding; compatible with compandored station carrier in small cables.

(2)Span line consists of (a) span terminating equipment, (b) line access units, (c) line repeaters and repeater housings.

(3)Optional Clear Channel Capability available.

(4)The Miniplex (2-channel system) listing includes the Miniplex 4NI (4-channel system).

(6)Unit is also listed as a concentrator. See category "ep."

(7)Only the DDL125, DDL135, DDL201, DDL205, DDL210, DDL221, and DDL237 are RUS Accepted. This is a 2-channel carrier system.

(8)The S-24DU listing includes the S-24DU HUB (240 lines)

(9)This is a HDSL (High-Bit Rate Digital Subscriber Line) System.

(10)Provides BRI ISDN.

gm - Digital Microwave Radio Systems

The following radio systems comply with PE-63 and Form 397d:

<u>Manufacturer</u>	<u>Designation</u>	<u>RF Band</u>	<u>Radio Capacity & Interfaces⁽¹⁾</u>	<u>Multiplex Designation</u>
Alcatel	MDR-5302	2 GHz	4 DS1	-
	MDR-5202	2 GHz	8 DS1	-
	MDR-5102	2 GHz	12 DS1	-
	MDR-4106C	6 GHz	1 DS3 (28 DS1)	DMX-3003
	MDR-4206	6 GHz	2 DS3 (56 DS1)	DMX-3003
	MDR-4306	6 GHz	3 DS3 (84 DS1)	DMX-3003
	MDR-4111	11 GHz	1 DS3 (28 DS1)	DMX-3003
	MDR-4211	11 GHz	2 DS3 (56 DS1)	DMX-3003
	MDR-4311	11 GHz	3 DS3 (84 DS1)	DMX-3003
	MDR-3118A	18 GHz	4 DS1	-
	MDR-3218	18 GHz	8 DS1	-
	MDR-3418	18 GHz	1 DS3 (28 DS1)	DMX-3003
	Cylink	Airlink T1	5 GHz	1 DS1 ⁽⁴⁾
DMC	DMC-2M/SE	2 GHz	4 DS1	-
	DMC-10M/SE	10 GHz	4 DS1	-
	DMC-18M	18 GHz	(4xN) DS1 ⁽³⁾	-
Harris-Farion	Urbanet 2	2 GHz	1 DS1 (4 DS1)	DVT 4
	DVM2-8T	2 GHz	2 DS2 (8 DS1)	DVT 8
	DVM6-45	6 GHz	1 DS3 (28 DS1)	DVT 44
	DM6-90	6 GHz	2 DS3 (56 DS1)	DVT 44 ⁽²⁾
	Urbanet 10ec	10.5 GHz	1 DS1 (4 DS1)	DVT 4
	DM11-45	11 GHz	1 DS3 (28 DS1)	DVT 44
	DM11-90	11 GHz	2 DS3 (56 DS1)	DVT 44 ⁽²⁾
Nortel Networks, Inc.	RD-4	4 GHz	2 DS3 (56 DS1)	DMT-300
	RD-6	6 GHz	3 DS3 (84 DS1)	DMT-300
	RD-11	11 GHz	3 DS3 (84 DS1)	DMT-300
TeleSciences	DR2C-96	2 GHz	4 DS1	-
	DR2D-192	2 GHz	8 DS1	-

Notes: (1)The basic radio capacity and interface is shown first; with additional multiplex equipment, the maximum DS1 capacity is shown as (xx DS1). The manufacturer's digital multiplexer designation is also shown; this may be plug-in cards for the radio equipment, or separate multiplexer equipment.

(2)Includes own mounting framework; not compatible with standard 19" racks.

(3)For N = 1, 2 or 4.

(4)Provides a wireless T1 link and uses spread spectrum technology.

<u>Manufacturer</u>	<u>Designation</u>	<u>RF Band</u>
	<u>w1 – Wireless Local Loop Systems</u>	
Cylink	VoiceXtender ⁽¹⁾	900 MHz

Notes:

(1) Uses spread spectrum technology.

pc - Stored Program Digital Switching Equipment

<u>Manufacturer</u>	<u>Base</u>	<u>Accepted System Release⁽⁵⁾</u>	<u>Acceptance Classification⁽¹⁾</u>	<u>RST(s)</u>
AG Communications Systems	GTD-5EAX	1732	A	RSU
American Digital Switching	Centura 2000	R1.00.03	A	CSS
Lucent Technologies	5ESS-2000 ⁽⁶⁾	5E14	A	EAIU RSM ORM TRM
Mitel	GX5000 ⁽⁷⁾	GS5008	A	RST
Nortel Networks, Inc.	DMS-10 ⁽²⁾	412.20	A	RLCM (OPAC) RSC-S Star Remote Hub
	DMS-100 ⁽³⁾	LEC00013	A	RLCM (OPAC) RSC-S RSC Star Remote Hub
Redcom Lab., Inc.	MDX	17.0	A	MDX-R
Siemens Information and Communication Networks	DCO ⁽⁴⁾	21.0 O-N-E UP	A	RLS-450 RLS-1080 RLS-4000
	EWSD	16.0	A	RCU RCU-160C RCU-800C

See page 6.4.1 for notes.

Notes:

- (1)Acceptance Classification: C-Conditionally Accepted, A-Accepted.
- (2)The DMS-10 listing includes the one and two bay version and its application as an HSO, SSO or LCC.
- (3)The DMS-100 listing includes its application as a DMS-200 tandem office and the smaller version of the SuperNode configuration, the DMS-SuperNode SE.
- (4)DCO listing includes the DCO-SE one and two bay configurations and DCO RNS.
- (5) The listed software/firmware system release is the most recent system release that was reviewed by RUS and found to be fully compliant with all requirements of 7 CFR 1755.522, RUS General Specification for Digital, Stored Program Controlled Central Office Equipment (Form 522). Other system releases may also be acceptable. For information on specific releases, please contact the Chairman, Technical Standards Committee "A" (Telecommunications), Rural Utilities Service, Stop 1598, 1400 Independence Avenue, SW., Washington, D.C. 20250-1598.
- (6)The 5ESS-2000 digital exchange listing includes the compact digital exchange 5ESS-2000 (CDX) and the very compact digital exchange 5ESS-2000 (VCDX) in host and remote switching terminal configurations. When a VCDX is upgraded to a CDX or full sized 5ESS-2000, it can host the listed RSTs. Unless it is upgraded it can only host the EAIU and does not offer emergency call processing.
- (7)The GX5000 listing includes the GX5000 S application, a one shelf pair, 19 inch rack mounted, small host or RST system configuration.

6.5
6-00
ep

Manufacturer

Type Designation

ep - Electronic Subscriber Line Concentrators

AFC	UMC 1000A ⁽⁶⁾
Alcatel	1218CS ⁽⁴⁾ Litespan-2000
HUBBELL Pulsecom	PSC Series 5 ⁽³⁾⁽⁵⁾
Lucent Technologies	AnyMedia SLC ^R Series 5 ⁽²⁾ SLC ^R -2000 Access System ⁽²⁾
NEC	ISC-303
Next Level Communications	Unified Access Platform
Nortel Networks, Inc.	S/DMS AN ⁽⁷⁾ DMS-1 URBAN
RELTEC Corp.	DISC*S
Siemens Information and Networks	914A, 914E

Notes: ⁽²⁾This listing includes the Lucent Technologies SLC^R-2000 Multi-Services Distant Terminal and the DDM-2000 FiberReach NarrowBand Shelf.

⁽³⁾This listing includes the following configurations: RT 596 (96 lines), RT5 192 (192 lines), RT384 (384 lines) and RT 576 (576 lines).

⁽⁴⁾This listing includes the 1218DS which provides for a single ended interface for use with the Alcatel 1210 digital switching system only.

⁽⁵⁾This listing includes the PSC Series 5 Fiber Kit.

⁽⁶⁾The system includes remote subscriber terminals with local exchange terminal units or TR-008 direct digital interface. Unit is also listed as a carrier system. See item category "ec."

⁽⁷⁾This listing includes the AccessNode Express and the Full Service Terminal (FST) configuration of the S/DMS AccessNode.

Manufacturer

Type Designation

gr - Ringing Generators

(Complies with PE-40)

Multifrequency Generators

Direct Current Powered

Minimum rating, watts per frequency:	<u>15</u>	<u>25</u>	<u>50</u>	<u>100</u>
ITT Power Systems	-	PEC 3694	-	PEC 3843
RELTEC Corp. (Lorain Products)	- T-25PR	T-25P ⁽¹⁾ T-50PR	T-50P ⁽¹⁾	-
Warren G-V Communications	-	TRG-25 ⁽¹⁾	TRG-50 ⁽¹⁾	-

Single-Frequency Generators

Direct Current Powered

Minimum rating, watts per frequency:	<u>25</u>	<u>50</u>
ITT Power Systems	-	PEC 3877
RELTEC Corp. (Lorain Products)	T-25P T-25PR	T-50P T-50PR

Note: ⁽¹⁾Basic series of equipment which may be applied in other configurations and combinations.

lt - Lightwave Digital Transmission Systems

lt-a Asynchronous Systems

<u>Manufacturer</u>	<u>Designation</u>	<u>Optical Bit Rate (Mb/s)</u>	<u>System Capacity & Interfaces⁽¹⁾</u>
ADC	SFLC	1.544	1DS1
	DFLC/XR/XT	1.544	1DS1
	QFLC	6.312	1DS2 (8 DS1)
Alcatel	DML-3x50	50	1DS3 (28 DS1)
		150	3DS3 (84 DS1)
AT&T	DDM-Plus	9.486	1DS2 (8 DS1)
	DDM-1000	90	2DS3 (56 DS1)
		180	4DS3 (112 DS1)
Nortel Networks, Inc.	FMT-6	6.312	1DS2 (4 DS1)
	FMT-150	150	3DS3 (84 DS1)
Telco Systems	FOX Family ⁽²⁾	6.312	See Below ⁽³⁾
	828AF/AF-XT	45	1DS3 (28 DS1)

Notes:

⁽¹⁾The basic lightwave system capacity and interface is shown with the maximum DS1 capacity shown in parenthesis. The DS3 rate is approximately 45 Mb/s and has the capacity for 28 DS1s. The DS1 rate is approximately 1.5 Mb/s and has the capacity of 24 voice channels.

⁽²⁾Includes only FOX-2, FOX-2R/R XT, FOX-2RS/RS XT, FOX-2 T-HUB.

⁽³⁾FOX-2 1DS2 (4 DS1), FOX-2R/R XT and FOX-2RS/RS XT 2DS2 (8 DS1), FOX-2 T-HUB 7DS2 (28 DS1).

It - Lightwave Digital Transmission Systems**It-b Synchronous Systems**

<u>Manufacturer</u>	<u>Designation</u>	<u>Optical Bit Rate</u>	<u>Configurations</u>		
			<u>Pt-Pt</u>	<u>Add/Drop</u>	<u>Ring</u>
ADC	DS3/OC1 FLC	OC-1	Y	N	N
Alcatel	TM-50	OC-1	Y	N	N
	ADM-50	OC-1	Y	Y	N
	1603/12 SM	OC-3	Y	Y	Y
		OC-12	Y	Y	Y
	1603 SMX	OC-3	Y	Y	Y
		OC-12	Y	Y	Y
OC-48		Y	Y	Y	
AT&T	DDM-2000	OC-3	Y	Y	Y
		OC-12	Y	Y	Y
Cisco Systems	Cisco 15454	OC-3	Y	Y	Y
		OC-12	Y	Y	Y
		OC-48	Y	Y	Y
Nortel Networks, Inc.	S/DMS Transport Node	OC-3	Y	Y	N
		OC-12	Y	Y	Y
		OC-3 Express ⁽²⁾	Y	Y	Y
Positron Fiber Systems	OSIRIS ⁽¹⁾	OC-3	Y	Y	Y
		OC-12	Y	Y	Y

⁽¹⁾Includes the MIST system.⁽²⁾Includes the CX (Compact Express).

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The manufacturers listed below have shown compliance with RUS requirements for the following anchor rods. Some manufacturers cannot supply all sizes listed. Check with manufacturer or distributor for availability.

x - Anchor Rods

<u>Types</u>	<u>Diameters</u>	<u>Lengths</u>
Single Guy	1/2"	7 ft.
Single and Double Guys	5/8"	7 & 8 ft.
Single and Double Guys	3/4"	8, 9, & 10 ft.
Single and Double Guys	1"	8, 9, & 10 ft.

Manufacturers

Eritech, Inc.
(Carolina Galvanizing Corp.)
A. B. Chance Company
Joslyn Manufacturing and Supply Company
Kortick Manufacturing Company
McGraw-Edison
Utilities Service Company

7.2
1-99
z

Manufacturer

Catalog Number

z - Anchors, Guy⁽¹⁾

Expanding and Plate Anchors

		<u>6000</u>	<u>10,000</u>	<u>16,000</u>
Holding Power - Lbs.:		6000	10,000	16,000
Min. Required Area, Proj. Sq. In.:		90	120	200
Rod Diameter, Inches:		5/8	3/4	1
Rod Length, Feet:		<u>7</u>	<u>8</u>	<u>10</u>
A. B. Chance	8 Way	-	88135G	1082G
Grip-Tite	8 Way	A322086-G	A322812-G	A322102-G
Joslyn	8 Way Plate	J8115G -	J8135G J7503G	J8200-1G -
McGraw-Edison	4 Way 6 Way Plate	DA1E5 - DA1P7	DA1E7 - DA1P9	- DA6E3 DA2P2
South Central	8 Way 4 Way	84115AG -	84135AG -	- 1042001G

Drive-Type

		<u>6,000</u>	<u>10,000</u>	<u>16,000</u>
Holding Power - Lbs.:		6,000	10,000	16,000
Rod Diameter - Inches:		<u>5/8</u>	<u>3/4</u>	<u>1</u>
Foresight Products		MR-3	MR-2	MR-I MR-SR ⁽²⁾

Notes: (1) Where galvanized anchors are listed, the same anchors ungalvanized (black asphalt coated) are also acceptable.

(2) Swamp anchor.

Manufacturer

Catalog Number⁽¹⁾

z - Anchors, Guy

Swamp Anchors

	<u>10" dia.</u>	<u>12" dia.</u>	<u>15" dia.</u>
A. B. Chance	10150AS	132AS	152AS
Foresight Products	-	MR-SR ⁽²⁾	-
Joslyn	J2871SG	J2872SG	J2873SG

Rock Anchors

	<u>Expanding Type</u>			<u>Split Wedge Type</u>
Anchor Size - Inches:	<u>1-3/4</u>	<u>1-3/4</u>	<u>1-3/4</u>	<u>-</u>
Rod Length - Inches:	<u>15</u>	<u>30</u>	<u>53</u>	<u>18</u>
Rod Diameter - Inches:	<u>3/4</u>	<u>3/4</u>	<u>3/4</u>	<u>1</u>
A. B. Chance	R315	R330	R353	-
Joslyn	J3436	J3437	J3438	-
Kortick	K5503	K5504	K5505	K2377
Utilities Service	CR315	CR330	CR353	-

Notes: ⁽¹⁾Where galvanized anchors are listed, the same anchors ungalvanized (black asphalt coated) are also acceptable.

⁽²⁾Drive type swamp anchor (see drive anchor category).

7.3
1-99
mk

Manufacturer

Catalog Number

mk - Drop Wire Clamps

Diamond Communications

23-44441
23-88881*

General Machine Products

7380-B

Reliable

2PRS*

*Suitable for use in corrosive areas.

Manufacturer

Catalog Number

aj - Ground Rod and Pipe Clamps

Station Installations (Indoors Only)

	.162" (#6 AWG) Copper	.102" (#10 AWG) Copper	.081" (#12 AWG) Copper
This conductor:			
Connected to:	Pipe Ground (Copper or Steel) <u>5/8"-1-1/4" O.D.</u>	Pipe Ground (Copper or Steel) <u>5/8"-1-1/4" O.D.</u>	Pipe Ground (Copper or Steel) <u>5/8"-1-1/4" O.D.</u>
Electric Motion	EM5507 EM5517 (3)	EM5507 EM5517 (3)	EM5507 EM5517 (3)
Reliable	13 (1) --	13 (1) 1 (1)(2)	13 (1) 1 (1)(2)

Notes: (1)Smallest size pipe this clamp can be used on is 3/4".

(2)Can only be used on copper pipe.

(3)Can accommodate one #6 to #14 AWG and one #10 to #14 AWG copper conductor.

7.4.1
1-99
aj

Manufacturer

Catalog Number

aj - Ground Rod and Pipe Clamps

Station Installations (Outdoors)

.081" (#12 AWG), .102" (#10 AWG) and .162" (#6 AWG) Copper

Connected to:	<u>Ground Rod (Galvanized Steel)</u>		<u>Ground Rod (Copper-Covered Steel)</u>	
	<u>1/2"</u>	<u>5/8"</u>	<u>1/2"</u>	<u>5/8"</u>
AMP, Inc.	1-83017-1 ⁽⁵⁾ 83017-5 ⁽⁴⁾ --	1-83017-3 ⁽⁵⁾ 83017-2 ⁽⁴⁾ --	1-81713-1 ⁽⁵⁾ 81713-5 ⁽⁴⁾ -- 81405-1	1-81713-3 ⁽⁶⁾ 1-81713-2 ⁽⁷⁾ 81713-1 ⁽⁴⁾ 81406-1
Blackburn ⁽¹⁾	G4P	G5P	G4	G5
H. L. Boggs	CR-1, M2009 ⁽¹⁾	CR-1, M2012 ⁽⁴⁾	CR-1, 2009 ⁽¹⁾	CR-1, M2012 ⁽⁴⁾
Burndy	GRC12 ⁽¹⁾	--	GRC12 ⁽¹⁾	--
Connector Castings ⁽¹⁾	--	--	G-4	G-5
Electric Motion	EM5507 EM5517 ⁽³⁾ EM1DB EM4DB ⁽¹⁾⁽⁸⁾	EM5507 EM5517 ⁽³⁾ EM2DB EM4DB ⁽¹⁾⁽⁸⁾	EM5507 EM5517 ⁽³⁾ EM1DB EM4DB ⁽¹⁾⁽⁸⁾	EM5507 EM5517 ⁽³⁾ EM2DB EM4DB ⁽¹⁾⁽⁸⁾
Erico ⁽¹⁾⁽²⁾ (Cadweld)	GR1-141G GR1-141A	GR1-161G GR1-161A	GR1-141G GR1-141A	GR1-161G GR1-161A
Eritech, Inc. (Knight Metalcraft)	--	--	CP 12	CP 58
Joslyn	--	--	J8491	J8492 ⁽⁴⁾
Penn-Union	CEB-1-TN ⁽⁴⁾	CEB-2-TN ⁽⁴⁾	CEB-1 ⁽⁴⁾	CEB-2 ⁽⁴⁾
Thomas & Betts	--	--	--	DGC58-66 ⁽⁴⁾

Notes:

- (1) Accepted only for use with 0.102" (#10 AWG) and 0.162" (#6 AWG) wire.
- (2) Includes disposable mold.
- (3) Can accommodate one #6 to #14 AWG and one #10 to #14 AWG copper conductor.
- (4) Accepted only for use with .162" (#6 AWG) wire.
- (5) Accepted only for use with 0.102" (#10 AWG) or 0.081" (#12 AWG) wire.
- (6) Accepted only for use with 0.102" (#10 AWG) wire.
- (7) Accepted only for use with 0.081" (#12 AWG) wire.
- (8) Can be used on a ground that is already occupied by another ground rod clamp on top.

Manufacturer

Catalog Number

me - Grounding Connectors

Connected to:	<u>.162" (#6 AWG) Copper</u>	<u>.102" (#10 AWG) Copper</u> <u>.162" (# 6 AWG) Copper</u>	<u>.102" (#10 AWG) Copper</u>
	<u>.162" (#6 AWG) Copper</u>	<u>.257" (#4 AWG)</u> <u>ACSR</u>	<u>.102" (#10 AWG) Copper</u>
AMP, Inc.	81663-1 ⁽²⁾	--	--
Anderson Electric	C-6	--	C-10
Blackburn	6H	--	--
Burndy	KS17	--	KS90
Dossert	DS2F	--	DS09F
Erico ⁽¹⁾	PGT-1G1G (Solid-to-Solid) PGT-1H1H (Stranded-to-Stranded) PGT-1H1G (Solid-to-Stranded)	-- --	PGT-1B1A (Stranded-to-Solid) PGT-1A1A (Solid-to-Solid)
Fargo	GC-5006	--	GC-5008
Joslyn	J3606	--	J3657F
Kearney	118102	--	118100
Penn-Union	S-6	SW-5	S-10
Reliable	6F	--	10F

⁽¹⁾Additional Erico CADWELD connectors are available for other combinations of ground wire.

⁽²⁾For use with two stranded #6 conductors only.

7.5.1
1-99
me

Manufacturer

Catalog Number

me - Grounding Connectors

(Compression Type)

.102" (#10 AWG) Copper
to
.109" (#12 BWG) (MPDW)

Burndy

YC8C8-ET

National Tel.

T2-109D

#6 Copper to
#4 & #6 Alum.

#6 Copper to
#2 & #4 Alum.

Blackburn

6CA

4CA

Burndy

KSA4

KSA2

Penn-Union

SW-5

SW-6

Manufacturer

Catalog Number

me - Grounding Connectors

Connected to:	<u>.102" (#10 AWG) Copper .109" (#12 BWG) Steel (MPDW)</u>	<u>#10 AWG Copper .134" Steel (MPDW)</u>
Blackburn	9TW	-
Burndy	KSL-15	-
Dossert	DSN1F	-
Penn-Union	SW-1	SW-2
Reliable	10FGB	8FGB

.102" (#10 AWG) Copper

Connected to galvanized steel strand:	<u>6M</u>	<u>10M</u>	<u>16M</u>
Aberdeen	AB 438	AB 438	AB 438
Blackburn	1HPS	1OHPS	20HPS
Burndy	-	KSU25	KSU26
Dossert	DSNS6F	DSNS10F	DSNS13F
Fargo	GC8010P	GC8020P	GC8020P
Joslyn	J-3030	J-3030	J-3030
Penn-Union	SW-6	SW-7	SW-8
Reliable	438ALC	438ALC	438ALC

.102" (#10 AWG) Copper

Connected to:	<u>Aluminum-Clad Steel Strand</u>		
	<u>6M</u>	<u>10M</u>	<u>16M</u>
Fargo	GA-620C	GA-620C	GA-620C
Penn-Union	PCA-010-H	PCA-010-H	PCA-010-H
Reliable	438ALC	438ALC	438ALC

For Buried Plant Housings (PE-91)

	<u>#6 AWG</u>	<u>#10 AWG</u>
Fargo	GC-164SHP(1) GC-5006SHP	GC-164SHP(1) GC-5008SHP

(1) Connector will accept braid.

7.6
1-99
am

Manufacturer

Catalog Number

am - Buried Service House Riser Guards

Type:	<u>Conduit</u>	<u>Closed "U"</u>	<u>Conduit</u>	<u>Conduit</u>	<u>Conduit</u>
Standard Length and Size:	<u>5' x 5/8"</u>	<u>5' x 5/8"</u>	<u>5' x 3/8"</u>	<u>20' x 1" I.D.</u>	<u>5' x 1/2" I.D.</u>
Coil Sales	12-119R	--	--	--	--
Phonotronics Inc.	R-070	--	--	--	R-061
Virginia Plastics	--	VP-B58*	VP-38-5*	VP-1-EC	--

*Staples will be required for mounting conduit. Double headed nails will be required for mounting Closed "U" type moulding. The mounting hardware shall be ordered separately from this manufacturer.

Manufacturer

Catalog Number

sl - Split Metal Cable Guards

10-Foot Straight Section

	<u>1" I.D.</u>	<u>3" I.D.</u>
Midland-Ross	SD15-10(1)	SD35-10(1)

5-Foot Straight Section

5-Foot Curved Section

	<u>1" I.D.</u>	<u>3" I.D.</u>	<u>1" I.D.</u>	<u>3" I.D.</u>
Butler	077005	077743	077004	077747
Midland-Ross	SD15-5(1)	SD35-5(1)	-	-

2-1/2-Foot Straight Section

2-1/2-Foot Curved Section

	<u>1" I.D.</u>	<u>3" I.D.</u>	<u>1" I.D.</u>	<u>3" I.D.</u>
Butler	077009	077745	077011	077749
Midland-Ross	SD15-2(1)	SD35-2(1)	-	-

(1) Elbows of varying sizes and angles may be ordered separately.

7.8
1-99
sg;wg

Manufacturer

Catalog Number

sg - Riser Guards (Pole)⁽¹⁾

Inside diameter, inches:	<u>1</u>	<u>2</u>	<u>3</u>
Carlton Products	-	59011	59013
A. B. Chance	6531-1/2	6533	6535
Custom Plastics ⁽²⁾	CPU1	CPU2	CPU3
Electrical Materials Co.	51-2	52-2	53-2
Fargo	UP-843G*	UP-844G*	UP-845G*
Inwesco	54B01	54B03	54B04
Joslyn	J984	J987	J989
McGraw-Edison	DU7P4	DU7P6	DU7P8
Midland-Ross Corp.	SD15-10 ⁽¹⁾⁽²⁾	SD25-10 ⁽¹⁾⁽²⁾	SD35-10 ⁽¹⁾⁽²⁾
Nordic Fiberglass	U-101 ⁽²⁾	-	-
RELTEC Corp. (Reliable Electric)	UP125-8G*	UP225-8G*	UP325-8G*

*Numbers shown identify painted guards. Use of riser guard straps with these guards not needed.

⁽¹⁾Order by inside diameter and length.

⁽²⁾Mounting staples must be purchased separately.

wg - Plastic Cable Guards

Longitudinally Split

Sizes, inches:	<u>1 x 8</u>	<u>1-1/2 x 8</u>	<u>2 x 8</u>
General Machine Products	7422-1	7422-1-1/2	7422-2

Spirally Cut

AMP
General Machine Products
Preformed Line

*Spirap (Specify diameter and length)
Type P " " "
Type PTG " " "

*Specify black outdoor polyethylene.

Manufacturer

Catalog Number

az - Numbers, Pole

Metal

	<u>1"</u>	<u>1-1/2"</u>	<u>3"</u>	<u>6"</u>
Almetek (1)	X	-	X	X
Premax (1)	-	X	-	-

Plastic

3M Company

No. 5012 (Use 3M decals from 3M-b)

Note: **(1)**Order by size and description.

7.10
1-99
ai

Manufacturer

Catalog Number

ai - Ground Rods
(without pigtails)

	<u>5/8" x 8'</u>	<u>1/2" x 5'</u>	<u>5/8" x 10' Sectional</u>	<u>Sectional Coupling</u>
Apache	G588* GR588-R**	G125* GR125-R**	GRS5810-R	GRC58
Blackburn	GR6258* 625813MX**	- -	- 6260S13MX**	- 60C
A. B. Chance	8578*	8565*	8512*	8611*
Eritech, Inc. (Carolina Galvanizing/ Knight Metalcraft)	815880* 615883**	811350* 611353**	835800* 635803**	GSC-58* CR58**
Galvan	GR6258*	GR5005*	-	-
Joslyn	J5328*	J5315*	J23282.10* J9160-13**	J23282-A* J9182**
Kortick	K4658-F*	-	-	-
McGraw-Edison	DN5S8*	-	DN13S110*	DN1K2*
Utilities Service	5307*	-	-	-
Wilcor	WA8580G*	-	-	-

*Galvanized Steel

**Copper-Covered Steel

Manufacturer

Catalog Number

y - Suspension and Guy Strand

These manufacturers' strands shown by X's comply with
RUS 7 CFR Part 1755.370

Utilities grade, steel, seven wire
(For use as suspension or for guys)

	<u>5/16"(6M)</u>	<u>3/8"(10M)</u>	<u>7/16"(16M)</u>	<u>Class</u>
Bekaert Corporation	X	X	X	A,B,C
Cal-Wire Stranding	X	X	X	A,B,C
CF&I Steel Corporation	X	X	X	A
Davis Walker Corporation	X	X	X	A
Florida Wire and Cable	X	X	X	A,B,C
Indiana Steel & Wire	X	X	X	A,B,C
National Strand Products	X	X	X	A,B,C
Seal Wire	X	X	X	A

Extra High Strength Grade, steel, seven wire
(For use as suspension or for guys)

	<u>1/4"(6M)</u>	<u>5/16"(10M)</u>	<u>7/16"(16M)</u>	<u>Class</u>
Aceros Camesa	X	X	X	A,B,C
Bekaert Corporation	X	X	X	A,B,C
Cal-Wire Stranding	X	X	X	A,B,C
CF&I Steel Corporation	X	X	X	A
Davis Walker Corporation	X	X	-	A
Florida Wire and Cable	X	X	X	A,B,C
Indiana Steel & Wire	X	X	X	A,B,C
National Strand Products	X	X	X	A,B,C
Paulsen Wire Rope Corp.	X	-	-	A
Seal Wire	X	-	-	A
Wire Rope Corporation of America (WRCA)	X	X	X	A

7.12
9-99
nw

Manufacturer

Catalog Number

nw - Cable Lashing Wires

	<u>Aluminum-Clad Steel</u>			<u>Type 430 Stainless Steel</u>		<u>Aluminum*</u>
	<u>.064</u>	<u>.045</u>	<u>.061</u>	<u>.045</u>	<u>.061</u>	
Diameter, Inches:						
Coil Length, Feet:	<u>600</u>	<u>1200</u>	<u>650</u>	<u>1200</u>	<u>650</u>	<u>375</u>
Aberdeen	-	-	-	45AC	61AC	-
Cable Spinning Equipment Company	-	-	-	13A	11A	16A
Central Wire	-	-	-	S4300004500LWA	S4300006100LWA	-
ECS Metals Limited	-	-	-	X	X	-
General Machine Products	-	-	-	7153A	-	-
Greening Donald Co., Ltd.	-	-	-	80608	80363	-
Industrial Alloys, Inc.	-	-	-	072-430-045-S	072-430-061-S	-
Loos & Company	-	-	-	045SA430LP	061SA430LP	-
Maryland Specialty Wire, Inc.	-	-	-	958-45M	958-61M	-
National Standard	-	-	-	03811	18815	-
Senior Industries	-	-	-	SI-9603	SI-9606	-

*This type of wire only, is to be used with aluminum-clad steel strand in seacoast areas.

Manufacturer

Catalog Number

c - Bolts, machine

	<u>5/8"</u>	<u>3/4"</u>
Chance	C88XX(1)	C89XX(2)
Joslyn	J88XX(6)	J89XX(7)

ao - Bolts, straight, thimble-eye

	<u>5/8"</u>	<u>3/4"</u>
Chance	C55XX(3)	C56XX(4)
Joslyn	J80XX(8)	J80XX(9)

ba - Bolts, angle, thimble-eye

	<u>5/8"</u>	<u>3/4"</u>
Chance	C50XX(3)	C51XX(5)
Joslyn	J81XX(8)	J81XX(9)

See page 7.13.1 for notes.

Notes:

- (1) Order bolts by changing X's in catalog number to length of bolt in inches; accepted for lengths 5", 6", 7", 8", 9", 10", 12", 14", 16", 18", 20", 22", and 24".
- (2) Order bolts by changing X's in catalog number to length of bolt in inches; accepted for lengths 8", 10", 12", 14", 16", 18", 20", 22", 24", and 26".
- (3) Order bolts by changing X's in catalog number to length of bolt in inches; accepted for lengths 10", 12", 14", and 16".
- (4) Order bolts by changing X's in catalog number to length of bolt in inches; accepted for lengths 12" and 14".
- (5) Order bolts by changing X's in catalog number to length of bolt in inches; accepted for lengths 10", 12", and 14".
- (6) Order bolts by changing X's in catalog number to length of bolt in inches; accepted for lengths 5", 6", 7", 8", 9", 10", 11", 12", 13", 14", 15", 16", 18", 20", 22", and 24".
- (7) Order bolts by changing X's in catalog number to length of bolt in inches; accepted for lengths 5", 6", 7", 8", 9", 10", 12", 14", 16", 18", 20", 22", 24", and 26".
- (8) Order bolts by changing X's in catalog number to length of bolt in inches; accepted for lengths 6", 8", 10", and 12".
- (9) Order bolts by changing X's in catalog number to length of bolt in inches; accepted for lengths 8", 10", and 12".

Manufacturer

Catalog Number

d - Washers

Type:	<u>Curved</u>			<u>Flat</u>		<u>Square</u>
	<u>2-1/2x2-1/2x3/16</u>	<u>3x3x1/4</u>	<u>3x3x1/4</u>	<u>2-1/4x2-1/4x3/16</u>	<u>2-1/4x2-1/4x3/16</u>	<u>2-1/4x2-1/4</u>
Hole sizes, in.:	<u>11/16</u>	<u>11/16</u>	<u>13/16</u>	<u>13/16</u>	<u>11/16</u>	<u>11/16</u>
Chance	-	6823 1/2	6822 1/2	-	-	6813
Stanley G. Flagg	-	-	P143A	-	-	-
Joslyn	J6822	J113	J6823	J1076	J1075	-

j - Screws, Lag

	<u>1/2" x 4"</u>	<u>5/8" x 5"</u>
Chance	C508754	-
Joslyn	J-8754P	J-8765

u - Guy Clamps

Strand size, inches:	<u>5/16</u>	<u>7/16</u>
Dulmison	F8-BCG3-58	-
Joslyn	J930	J931

ab - Thimble-Eye Nuts

Size, inches:	<u>5/8</u>	<u>3/4</u>	<u>3/8</u>
Chance	6510	-	-
Dulmison	F8-TEN-58	-	-
Continental Electric Company	TN-5	TN-6	-
Stanley G. Flagg	P128A	-	P129A
Joslyn	J6510	J6511	-

7.15
7-00
bk ; br ; ek ; mz

Manufacturer

Catalog Number

bk - Guy Lift Plates

	<u>For 5/8" Bolts</u>	<u>For 3/4" Bolts</u>
Chance	-	7897
Joslyn	J7896	J7894

br - Guy Hooks

Bolt size (inches):	<u>5/8</u>	<u>3/4</u>
Continental Electric Company	GA-5X	GA-64
Stanley G. Flagg	P135AX	P134AX
Joslyn	J6555	J6556

ek - Locknuts

Size:	<u>5/8"</u>	<u>3/4"</u>
Joslyn	J8583	J8584

mz - Cable Suspension Clamps

Type:	<u>Straight</u>	<u>Angle</u>
Chance	C7903	C7902L
Dulmison	F8-BMC3-58	-
Joslyn	J1096	J7902-B

Manufacturer

Catalog Number

nb - Suspension Clamp Reinforcement Straps

Size:	<u>1-3/4"</u>	<u>2"</u>
Chance	C7905	-
Joslyn	J7905	J7908

px - Regular Square Nuts

Size:	<u>5/8"</u>	<u>3/4"</u>
Chance	C55084P	C55085P
Joslyn	J8563	J8564

The following items have been removed from the List of Materials because of their limited use and not because of their inability to meet applicable requirements. Their removal from the list does not relieve borrowers of their responsibility to use materials that meet RUS requirements, ASTM or other national specifications.

- i - Bolts, carriage
- aa - Oval eye nuts
- al - Ground wire staples and nails
- at - Guy guards
- bl - Steel support brackets
- bm - Guy thimble
- cb - Conductor bundle bags
- df - False deadends
- dm - Permanent cable identification markers
- dz - Guy wire clips
- mf - Drive hooks
- mi - Drop wire support
- mj - Drop wire clip
- mm - Drive rings
- mo - Angle screw
- mx - Steel pole steps
- my - Drop wire hooks
- na - Aerial and underground cable
- nc - Cable extension arms
- nd - Metal pole keys
- ne - Bridle rings
- ns - Span clamps
- pg - Porcelain insulated screweyes
- ph - Screw anchors
- pk - Moisture blocks
- pt - Vinyl tape
- pw - Detachable pole steps
- py - Lashing wire terminal clamps
- st - Spacer tape
- tc - Cable ties
- wf - Self-supporting cable
- za - Filler tape
- ze - Sealing compound